GeoEnviroTech, Inc.

· Geological Services · Site Characterization & Remediation · Phase I/II Assessments
· Subsurface Soil & Groundwater Sampling · Drilling Services · Monitoring Wells

SOIL SAMPLING AT FORMER UST'S AREAS, CORCO FACILITY PEÑUELAS, PUERTO RICO

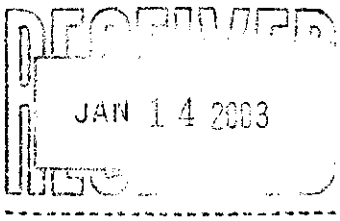
Prepared for:

***Commonwealth Oil Refining Company, Inc.* (CORCO)**

600 Road 127

Peñuelas, PR 00624-7501

January 13, 2003



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SOIL SAMPLING AT FORMER UST AREAS
CORCO FACILITY, PEÑUELAS, PUERTO RICO

1.0 INTRODUCTION

On April 2002, the *Commonwealth Oil Refining Company, Inc.* (CORCO) retained the services of *GeoEnviroTech, Inc.* (GET) to perform a limited soil sampling at two former underground storage tanks (USTs) areas located within their premises. The facility is located at State Road PR-127, km. 17.3, in the municipality of Peñuelas, Puerto Rico.

This report documents soil borings activities performed at two former UST's areas identified as:

A. Adjacent to Procon Building (PROCON), and
B. Fueling area (FUELING).

Sampling at the PROCON area was triggered by a tank closure report prepared by CORCO on September 2000 and an addendum dated January 2001. A single soil sample collected at the PROCON area showed high diesel range organics (DRO) values.

On December 1998 a 1,000-gallon gasoline UST was removed from the FUELING area. Soil samples collected during tank closure activities resulted in total petroleum hydrocarbon

(TPH) concentrations above the 100 mg/kg regulatory criteria. On May, 2002 soil samples were collected within the former gasoline UST perimeter. Some samples resulted in TPH concentrations above regulatory levels. On September 2002 a second sampling event was aimed toward defining lateral and vertical extent of the apparent contamination discovered and associated to the gasoline UST at the FUELING area, confirmed during first sampling event.

The purpose of the soil sampling was to determine whether there was an environmental contamination impact present in the soil along the perimeter of FUELING and PROCON UST's systems removed on December 1998 and August 2000, respectively, associated to the operation/presence of those UST's, exceeding the Puerto Rico Environmental Quality Board (PREQB) threshold for Total Petroleum Hydrocarbons (TPH). Activities consisted of performing soil borings at selected areas. Field activities were conducted according to our proposals No. GET-01-023, dated October 25, 2001, and GET-02-097, dated August 15, 2002. The first proposal was submitted as a work plan to the PREQB by CORCO. Proposed activities were approved by the PREQB on April 2002.

The scope of work consisted on the following specific tasks:

a) Drill eighteen (18) soil borings divided as follows:
   I. Drill thirteen (13) soil borings FUELING area;
   II. Drill five (5) soil borings PROCON area;
b) Field analysis with an Organic Vapor Analyzer and colorimetric tubes calibrated for gasoline vapors;
c) Chemical analyses of selected soil samples.

Field activities were conducted in two phases. The first phase was performed in May 2002 and included eight (8) borings at the FUELING area and five (5) borings at the PROCON area. Based on findings during the first phase, an additional soil sampling was performed in September 2002 which consisted of five (5) additional borings at the FUELING area.

Drilling services, field screening and soil sampling were performed by GET personnel. Environmental laboratory analyses were performed by *On Site Labs, Inc.* (On Site Labs) located in Guaynabo, Puerto Rico. Sampling activities were coordinated and partially overseen by CORCO representatives.

1.1 Report Organization

This report is organized in ten (10) sections. Section 1.0 includes the scope of this report, parties involved, reason for performing the work and report organization. Section 2.0 describes facility background based on information gathered from available documents such as topographical and geological maps, environmental databases, user provided information and general information. Section 3.0 describes field activities including field sample collection methods, field analysis methods, field description and chemical sample collection methods. Section 4.0 describes the results from field and chemical sampling analyses. Section 5.0 includes a summary of key findings. Section 6.0 presents conclusions and recommendations. Section 7.0 includes limiting condition related to field activities, chemical analysis and report preparation, if any; and the signatures of the specialists that prepared this report. Section 8.0 includes the figures referred to in this report and Section 9.0 includes tables of field screening and chemical analyses of detectable parameters. Section 10.0 includes the appendices related to this environmental report.

2.0 SITE DESCRIPTION

Site topography slopes towards the south and ranges from 280 to 0 feet above mean sea level. **Figure 8.1** presents the site location on a portion of a *United States Geological Survey* (USGS) 7.5 minute map of the Peñuelas quadrangle.

At the time of conducting field activities, the site consisted of administrative, storage and maintenance buildings, inactive manufacturing plants, and petroleum products tank farms and distribution systems. **Figure 8.2** presents a site diagram provided by CORCO. **Figure 8.3** presents a 1993 aerial photograph showing site locations.

2.1 Background

The CORCO facility is located on an industrial area at kilometer 17.3 of state road PR-127, between the municipalities of Guayanilla and Peñuelas, Puerto Rico. The CORCO site is located on a highly industrialized area, mostly occupied by former petrochemical complexes both active and inactive. Adjacent properties includes *The Shell Company*, *Puerto Rico Electric Power Authority* (PREPA), *DOW Chemical* (formerly *Union Carbide*), *South Pearl Chemical* (formerly *Esso Bulk Terminal*), and *Hercor Chemical Corp.* Petroleum and petrochemical activities have been performed in this area for over 45 years. There is a recognized plume of free hydrocarbons presumably resulting from these activities that is presently being recovered by CORCO. PREQB and the *United States Environmental Protection Agency* (EPA) are aware of the free product beneath the area occupied by the petrochemical complex plume and the recovery effort being performed by CORCO as part of its mitigation activities.

Please note that the subsurface investigation documented on this report was limited to two distinctive small areas (PROCON and FUELING) that represent a tiny fraction of the whole petrochemical complex. The CORCO site has been extensively investigated by *Versar, Inc.* (1986), *Roy F. Weston, Inc.* (1989), *GDC Engineering, Inc.* (1994), and *DSM Environmental Services, Inc.* (1994, 1996), and others. Subsurface characteristics in the vadose and saturated zones have been studied and documented by the above referenced consultants.

In 1994, CORCO contracted the services of *DMS Environmental Services, Inc.* (DMS) to perform a subsurface investigation within its premises. From this study it was estimated that a significant amount of free product was present beneath the CORCO facility. DMS investigations also suggest that a geological barrier exists along PR-127 which prevented the migration of product south of the property, except at areas where the barrier has been jeopardized by underground utilities. **Figure 8.4** presents a September 27, 1994 isopach map showing product thickness within the CORCO facility.

As stated on Section 1.0 of this report, sampling at the PROCON area was triggered by a tank closure report prepared by CORCO. On August 2000 a single sample of soil collected at the PROCON area showed high diesel range organics (DRO) values.

On December 1998 a 1,000-gallon gasoline UST was removed from the FUELING area. Soil samples collected during tank closure activities resulted in total petroleum hydrocarbon (TPH) concentrations above the 100 mg/kg regulatory criteria. On May, 2002 soil samples were collected within the former gasoline UST perimeter. Some samples resulted in TPH concentrations above regulatory levels. On September 2002 a second sampling event was aimed toward defining lateral and vertical extent of the apparent contamination discovered and associated to the gasoline UST at the FUELING area, confirmed during first sampling event.

2.2 Hydrogeology

Site geology is described in the USGS geologic map of the Peñuelas and Punta Cuchara quadrangle (Map I-1042, 1978). According to the geologic map, the evaluated areas are near the contact of Miocene Ponce limestone (identified as *Tp*) and Holocene alluvial deposits (*Qa*). The limestone formation is described as very pale orange to grayish orange generally crystalline calcarenite. These deposits contain abundant internal molds of fossils. Thickness exceeds 200 meters (656 feet). The alluvial deposits consist of cobbles, pebbles,

sand, clay and sandy clay in different proportions. This unit has a variable thickness and may exceed 30 meters (98 feet). **Figure 8.5** presents the site location on a portion of the geologic map.

According to DSM Report dated November 1994, Route PR-127 bisects the CORCO facility on an east to west bearing. The roadway is built on/at the interface of the Ponce Limestone and the Alluvial Deposits. Route 127 is built on the alluvial flats and follows the contour of the Ponce Limestone hill-sides. Hydrogeologic data collected during several subsurface investigations suggests that Route 127 act as a possible hydraulic barrier at the CORCO facility preventing migration of free product south of CORCO. The water table in this area appears to mound up adjacent to the roadway. This phenomenon would confine LNAPL's to the Ponce Limestone. **Figure 8.4** presents a September 27, 1994 isopach map prepared by DSM showing product thickness within the CORCO facility. According to the diagram, product thickness ranged from Non-Detectable to approximately 10-feet. Highest product thicknesses were detected in the central and western areas. The purported hydraulic barrier along the south southeastern property boundary and state road PR-127 can be clearly identified on **Figure 8.4**.

The closest surficial stream is an effluent channel located at approximately two hundred (200) meters (656 feet) south of the UST system removed on August 2000. This effluent channel flows westward and then southward into the *Tallaboa Bay*.

Based on consulted sources, groundwater in the vicinity of the evaluated areas occurs under water table conditions. Regional groundwater flow is towards the south-southwest. Poor groundwater quality is expected due to the vicinity of the coastal zone which will cause higher salinity of groundwater making it unsuitable for human consumption without treatment. In addition, previous studies has shown that groundwater beneath most of CORCO's facility is affected by either free product and/or a dissolved hydrocarbons plume.

2.3 Receptors

Information obtained from databases maintained by the *Environmental Protection Agency* (EPA), USGS, *Puerto Rico Department of Environmental and Natural Resources* (DENR) and the *United States Department of Census* (USDC) is presented in a map included as **Figure 8.6.** The information on these databases is correct to the date they were obtained and as the controls maintained by these agencies allows.

Approximately 12 groundwater extraction wells were identified within a half-mile radius of the evaluated areas. These wells were identified as *Pozo Fuentes Fluviales #1, #2, #3* and *#4, Pozo PR Shell #1, Pozo CORCO #1, #7, #8* and *#13, Union Carbide #6,* and, *U. C. Cooling Tower #1* and *#2.* The existence of additional private or unregistered wells in the area is not known.

Although wells *Pozo Fuentes Fluviales #1* (1062 meters from FUELING), *#2* (1142 meters from FUELING), *#3* (1050 meters from FUELING) and *#4* (1020 meters from FUELING) are located towards the estimated regional hydraulic gradient (southwest), it is unlikely that the hydrocarbon plume at the FUELING area have reach those wells located at about one kilometer apart. However, we have no knowledge on whether these wells are currently active or inactive or the dynamics or interaction of the hydrocarbon plume with them, if any.

Figure 8.6 also identifies the Union Carbide and South Coast (a.k.a. Costa Sur, PREPA facility) facility located south and southwest, respectively, of the CORCO property as an EPA monitored sites.

3.0 SOIL SAMPLING

Initial soil sampling activities were performed between May 7 and 9, 2002 at both PROCON and FUELING areas. Based on analytical results, a second sampling event was performed at the FUELING area during September 18 to 20, 2002. Soil samples were obtained with a *Geoprobe® 66DT* unit to depths ranging from surface to thirty (30) feet below existing grade.

A total of eighteen (18) borings were performed at selected areas-of-concern to obtain soil samples. Boring locations are presented in **Figures 8.7** and **8.8**. Borings were identified with the prefix **B** followed by a number starting in one (1) consecutively through thirteen (13) and a second series starting at 201 to 205. Boring location was as follows:

3.1.1 FUELING Area

B-1, B-2, B-3, B-4, B-5, B-11, B-12, B-13, B-201, B-202, B-203, B-204, and B-205.

3.1.2 PROCON Area

B-6, B-7, B-8, B-9, and B-10.

Soil samples were obtained using clear disposable, sixty (60) inches long PVC liners attached to Geoprobe macrocore samplers. The recovered soil sample was immediately placed in a sealed plastic bag ("Ziplock™") for field screening and description. Portion of the same soil sample was placed in laboratory glass jars for potential chemical analyses. Samples were transferred to sampling jars using decontaminated stainless steel spatulas.

Sampling information was written on a field book and included the date and time the sample was collected, depth, color as specified in the *Munsell Color Chart*, field screening readings, soil type (sand, clay, silt, etc.) and other information that the technician deemed relevant.

Boring depth ranged from 12 to 30 feet below existing grade at the FUELING area and 15 feet at PROCON area. Boring depth was limited at the FUELING area by the presence of fossiliferous limestone rock at some borings. Borings at both areas were sealed with cement/bentonite grout after completing drilling operations.

3.2 Field Screening

Selected soil samples were screened in the field using an Organic Vapor Analyzer equipped with a Photo Ionization Detector (PID), and colorimetric tubes calibrated for gasoline vapors (DT). DT's were used to be selective with which organic vapors were tested. OVA's detect a wide range of organic vapors, and given the history of the site, DT's were used to correlate values obtained in the field with the PID. Soil description, sample collection time and OVA readings were recorded on a boring log.

3.3 Laboratory Sampling

Selected soil samples were placed in laboratory-provided containers for analysis by On Site Labs in Guaynabo, Puerto Rico. Samples were placed in the containers using decontaminated stainless steel spatulas. Decontamination procedure was as follows:

a) Sampling equipment was washed with Liquinox® detergent.
b) Rinsed with tap water.
c) Rinsed with distilled water.
d) Air dry the equipment followed by wrapping in aluminum foil.

Samples selected were identified according to the boring number from which they were obtained and sampling depth (expressed in feet). A total of twenty two (22) samples were collected. Samples selected were identified as follows:

3.3.1 FUELING Area:

B-1 @ 10'-15'
B-2 @ 10'-15'
B-3 @ 10'-13'
B-4 @ 10'-13'
B-5 @ 10'-12'
B-11 @ 10'-15'
B-12 @ 0'-5'
B-12 @ 10'-15'
B-100 (Dup. of B-5)
B-13 @ 5'-10'
B-13 @ 10'-15'
B-201 @ 25'-30'
B-202 @ 25'-30'
B-203 @ 5'-10'
B-204 @ 10'-11.5'
B-205 @ 15'-20'
B-210 (Dup. of B-203)

3.3.2 PROCON Area:

B-6 @ 10'-15'
B-7 @ 10'-15'
B-8 @ 10'-15'
B-9 @ 10'-15'
B-10 @ 10'-14'

Selected samples were placed in a cooler with ice to maintain an approximate temperature of 4° C and transported to On Site laboratory. To maintain control of samples during shipment and processing, chain-of-custody records were maintained. A copy of the chain-of-custody documentation is included in **Appendix 10.1**.

Soil samples collected from the FUELING area were analyzed for *Total Petroleum Hydrocarbons* (TPH) gasoline range organics (GRO). Soil samples collected from the PROCON area were analyzed for TPH-diesel range organics (DRO).

As part of the Quality Assurance and Quality control (QA/QC) procedures, two (2) trip blank (TB), six (6) equipment blanks (EB) and six (6) field blanks (FB) were collected.

4.0 RESULTS

4.1 Soil Boring Data

Physical and lithologic characteristics of collected soil samples were described on-site by a geologist. A brief description of the subsoil conditions found during this exploration is presented below. For a detailed subsoil description please refer to **Table 9.1**.

Borings drilled at site disclosed the presence of brown to grayish calcareous sands and silts ("caliche") with occasional limestone fragments and some clay. Fossiliferous limestone rock was found between 12 and 13 feet at borings **B-3**, **B-4** and **B-5**. In general, relative moisture content increased with depth.

At the FUELING area, groundwater table was found at approximately 30 feet below existing grade. Free product was not observed at this area.

At the PROCON area, groundwater was found at approximately 14-feet below existing grade. Soils beneath the capillary fringe showed dark gray staining and hydrocarbon-like odor. A very dark light non aqueous phase liquid (LNAPL) was observed in the saturated zone.

4.2 Field Screening Results

Table 9.1 summarizes field screening results for PROCON and FUELING areas.

4.2.1 FUELING

Results of soil samples obtained for field screening with the OVA resulted in concentrations of organic vapors that ranged from Non-Detectable (ND) to over 2,000 parts per million (ppm). Field screening using DT resulted in concentrations that ranged from ND to over 2,000 ppm. The highest measured field concentrations were detected in borings **B-1** and **B-2.**

4.2.2 PROCON

Results of soil samples obtained for field screening with the OVA resulted in concentrations of organic vapors that ranged from Non-Detectable (ND) to 715 ppm. Field screening using DT resulted in concentrations that ranged from ND to 600 ppm. The highest measured field concentration was detected in boring **B-7** at the 10-15 feet interval.

4.3 Laboratory Results

Table 9.2 summarizes TPH laboratory results.

4.3.1 FUELING

Samples collected resulted in TPH-GRO concentrations ranging from **ND** to **19,000** mg/kg. Highest concentrations were detected at samples collected from borings **B-1**, **B-2**, **B-13**, **B-201** and **B-205**. Please note that an underground injection control system (UIC) (septic tank) was located adjacent to boring **B-205**.

4.3.2 PROCON

Samples collected resulted in TPH-DRO concentrations ranging from **ND** to **5,700** mg/kg. Highest concentrations were observed at **B-6**, **B-7** and **B-8**.

QA/QC samples did not present detectable concentrations of the parameter analyzed for. Laboratory results are included in **Appendix 10.1**.

5.0 FINDINGS

Based on field observations, literature research and laboratory results the following findings are presented:

a) The CORCO site is located on a highly industrialized area, mostly occupied by petrochemical complexes both active and inactive.
b) Subsurface characteristics have been studied and documented by several environmental companies since 1986.
c) According to 1994 and 1996 DSM investigations there was approximately 1,379,351 barrels of free product beneath the CORCO premises. Groundwater flowed towards the southwest and was limited to the south by a geological contact that appears to prevent free product migration towards the south. This contact occurred along PR-127, near the FUELING area.
d) Site geology is defined by a limestone formation in contact with alluvial deposits, just south of the evaluated areas. The contact between these two units occurs along PR-127 and consists, mainly, of sandy clay.
e) Site lithology consisted of brown to grayish calcareous sands and silts ("caliche") with occasional limestone fragments and some clay. Limestone bed

rock was found between 12 and 13 feet at borings **B-3**, **B-4**, **B-5**, **B-203** and **B-204**.

f) At the FUELING area, groundwater table was found at approximately 30 feet below existing grade. No free product was observed on this area.

g) At PROCON area, groundwater was found at approximately 14 feet below existing grade. In this area soils beneath the capillary fringe showed dark gray staining and hydrocarbon-like odor. A very dark light non aqueous phase liquid was observed in the saturated zone.

h) Approximately 12 groundwater extraction wells were identified within a half-mile radius from the evaluated areas. Most wells are located far towards the northeast. Four wells are located southwest of the CORCO property. Whether or not these wells are active is unknown to our company. Reportedly, groundwater gradient is towards the south-southwest.

i) Due to the vicinity of the coastal zone, poor groundwater quality is expected because of saline intrusion. Groundwater quality beneath the facility is also affected by the presence of free product and dissolved hydrocarbons.

j) FUELING area – Field screening resulted in organic and gasoline vapor concentrations ranging from **ND** to over **2,000** ppm. Highest field concentrations were detected in borings **B-1**, **B-2** and **B-13**.

k) PROCON area – Field screening resulted in organic and gasoline vapor concentrations ranging from ND to 715 ppm. The highest field concentration was detected in boring **B-7**.

l) FUELING area – Collected soil samples resulted in TPH-gasoline range concentrations ranging from **ND** to **19,000** mg/kg. Highest concentrations were detected at samples collected from borings **B-1**, **B-2**, **B-13**, **B-201** and **B-205**.

m) PROCON area – Collected soil samples resulted in TPH-diesel range concentrations ranging from **ND** to **5,700** mg/kg. Highest concentrations were detected at samples collected from borings **B-6**, **B-7** and **B-8**.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on field observations, consulted literature, laboratory results and past experience, the following conclusions and recommendations are made:

a) Field screening and chemical analyses indicates the presence of petroleum hydrocarbons at the evaluated areas.

b) Hydrocarbon vapors in the FUELING area showed high concentrations at relatively shallow depths to approximately 15 to 30 feet below ground surface in this area. Since hydrocarbon vapor concentration at the FUELING area started at approximately 25 feet above groundwater table and the free product plume, the source of these concentrations appears to relate to the removed gasoline tank. The presence of free product was not observed at this area.

c) Based on chemical analyses, the lateral extent towards the north, west and east of the FUELING area, was defined by borings **B-4**, **B-5**, **B-11**, **B-12**, **B-202**, **B-203** and **B-204**. TPH concentrations at those boring locations were either ND or below EQBs acceptable criteria of 100 mg/kg. Although the southeastern extent of the affected area was not completely established, it is inferred that hydrocarbon migration is limited by the geologic contact between the Ponce Limestone and Alluvial Deposits along state road PR-127, as indicated by previous studies of the area. **Figure 8.10** presents the inferred extent of the affected area. At the FUELING area, hydrocarbon concentrations exceeding the 100 mg/kg TPH criteria have an approximate area of 150 feet long by 50 feet wide. The vertical extent of the affected area was limited by the limestone bedrock or groundwater table, located at approximately 30 feet below existing grade in this area. Please note that several borings down-gradient of the FUELING area reached the water table, and although high hydrocarbon vapors were detected, no free product was found. The shallow plume, given time, is expected to commingle with the

free product and dissolved hydrocarbon plume migrating from the upper (northern) tank farm.

d) Hydrocarbon concentrations of samples collected at the PROCON area appear to be related to the existing hydrocarbons plume in the saturated zone. Hydrocarbon staining and odors were detected in the capillary fringe at approximately 13 feet below existing grade. Soils immediately beneath and surrounding this former UST pit did not show hydrocarbon impact. Highest TPH concentrations in this area were detected at borings **B-6** and **B-7**. These borings are topographically upgradient. Although not quantified, samples with detectable diesel range concentrations also had gasoline range concentrations, which is consistent with Naphtha-like hydrocarbons. Please note that samples collected during the August 2000 tank closured did not show TPH-gasoline range concentrations. Therefore, based on the available information, we may reasonably conclude that the groundwater in the vicinity of the UST has not been impacted by the UST but rather by a hydrocarbon plume already known at the site. This plume is currently being monitored and recovered under an ongoing program, as part of a proposal submitted to the EPA in 1998.

e) Since groundwater beneath the facility is estimated to be brackish, primary drinking water standards might not be applicable to this site. Even if groundwater quality is found to be potable, free product and dissolved hydrocarbons have been detected within and upgradient of the PROCON and FUELING areas. Based on previous data and recent groundwater and free product measurements collected by CORCO personnel, these areas are being affected by contamination migrating from the upper tank farms. Thus, any active cleanup alternative at these two relatively small areas might be ineffective if not addressed concurrently with the general site clean-up effort. The plume associated to the FUELING area will be subject to the natural attenuation process carried by microbial communities degrading the hydrocarbons. This will, theoretically, shrink the size of the plume[1,2,3] as long

as: a) there is not an active source that releases hydrocarbons at a higher rate than the degradation rate (UST is already removed), and, b) the microbial community is not inhibited by the presence of toxic constituents. The concentrations observed indicate that after four years of the removal of the UST, the highest concentration (B-1 19,000 ppm) has migrated approximately twenty feet from the source and then follows an imaginary line towards the southeast (B-205 2,100 ppm) with boundaries defined to the east (B-204 ND) and west (B-203 ND, B-202 60 ppm). Two possible outcomes can be inferred regarding the FUELING plume: a) the plume will shrink according to the natural attenuation process; and, b) the FUELING plume will reach and commingle with the CORCO plume. If outcome b occurs before outcome a, and since CORCO is currently addressing the larger plume, the FUELING plume will be addressed as it becomes part of the CORCO plume needing no additional action on CORCO's behalf.

7.0 LIMITATIONS

The conclusions made in this report are based on a limited number of samples, field observations, laboratory results, consulted documents and our experience in similar situations. If conditions change or additional information is made available, we reserve our right to revise our conclusions.

This report, including related activities, was prepared and directed under the supervision of GeoEnviroTech, Inc. Our services were completed with the detail and attention commonly used in similar situations by other professionals and engineers practicing in this field. No other guarantee, explicit or implicit, on consulting services is made.

Jesse Avilés
Microbiologist

Juan D. Negrón, PG, REM
Principal Geologist

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[2] Margesin, R., Schinner, F; *Bioremediation (Natural Attenuation and Biostimulation) of Diesel-Oil-Contaminated Soil in an Alpine Glacier Skiing Area* Applied Environmental Microbiology 2001 67: 3127-3133

[3] Weiner, Jonathan M., Lovley, Derek R. *Rapid Benzene Degradation in Methanogenic Sediments from a Petroleum-Contaminated Aquifer* Applied Environmental Microbiology 1998 64: 1937-1939

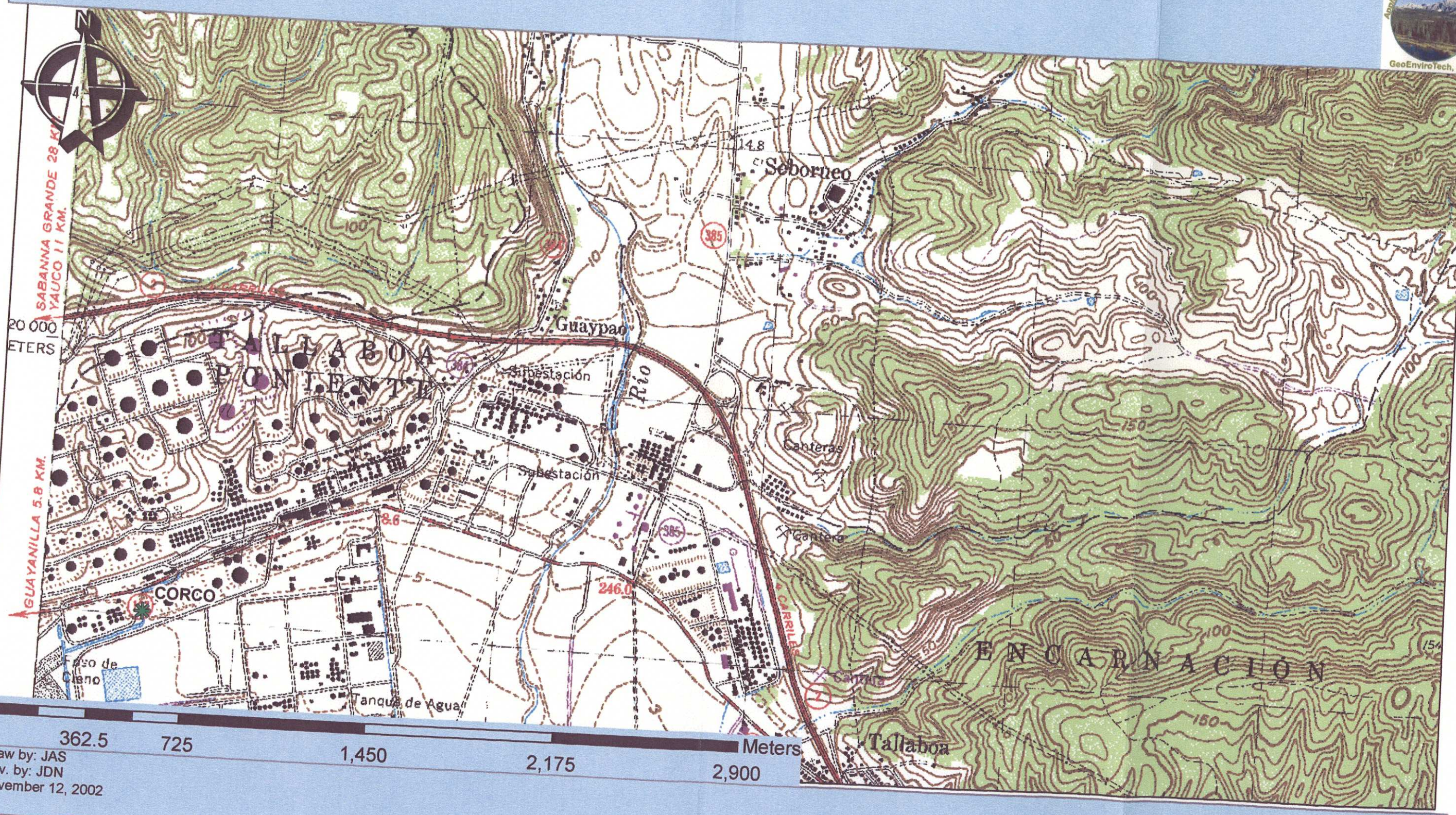
FIGURES

SOIL SAMPLING AT FORMER UST'S AREAS

Commonwealth Oil Refinery Company
Peñuelas, Puerto Rico

8.1 Site Location
8.2 Site Layout
8.3 Aerial Photo
8.4 Isopach Map
8.5 Geologic Map
8.6 Receptors within a 0.8 kilometer radius
8.7 Boring Locations: FUELING Area
8.8 Boring Locations: PROCON Area
8.9 Field Concentrations Cross Section Analysis at FUELING area
8.10 Inferred contour diagram

Figure 8.1
Site Location
Commonwealth Oil Refinery Company
Peñuelas, PR



Draw by: JAS
Rev. by: JDN
November 12, 2002

GeoEnviroTech, Inc.

Figure 8.3
Aerial Photograph
Commonwealth Oil Refinery Corporation
Peñuelas, Puerto Rico

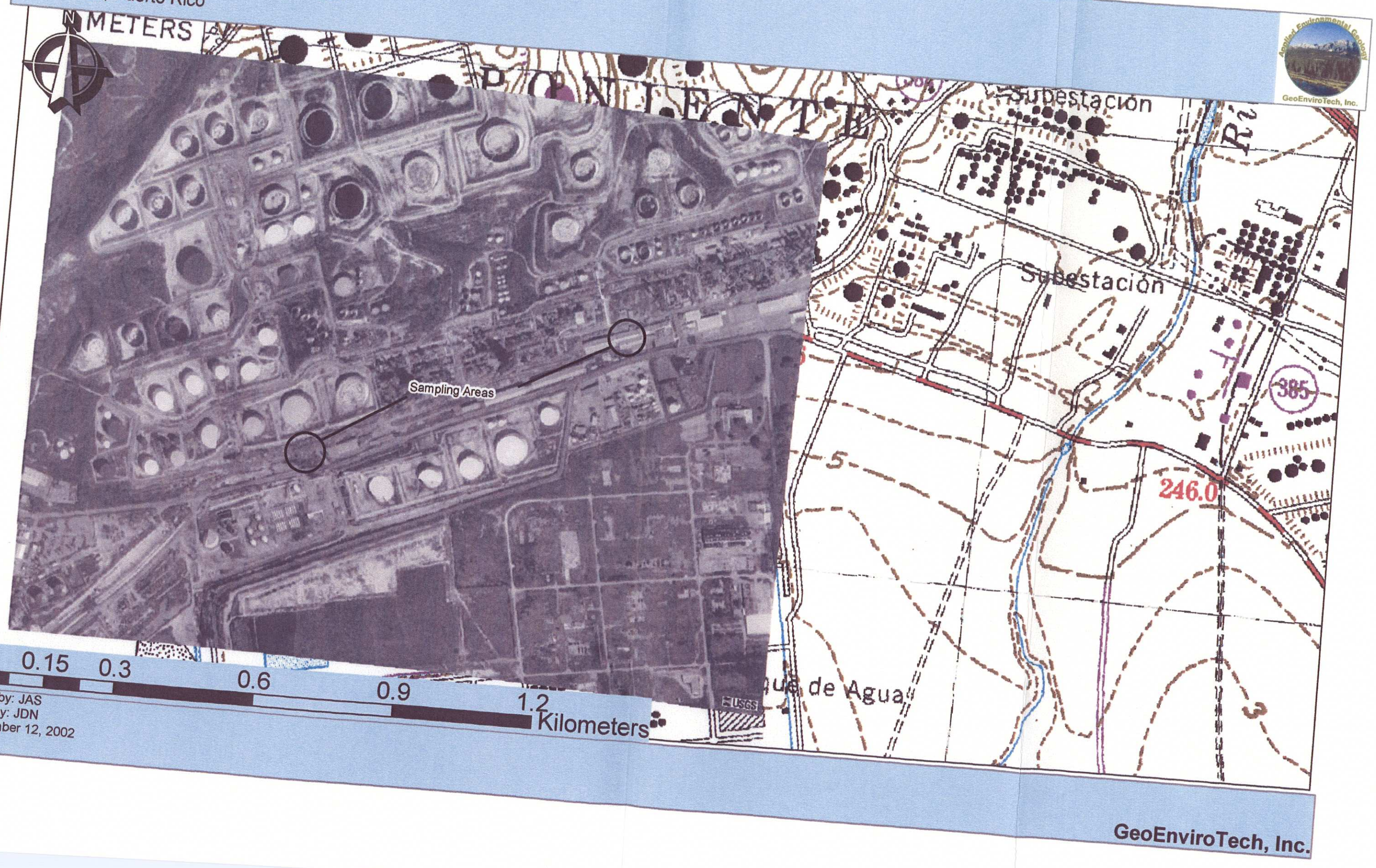
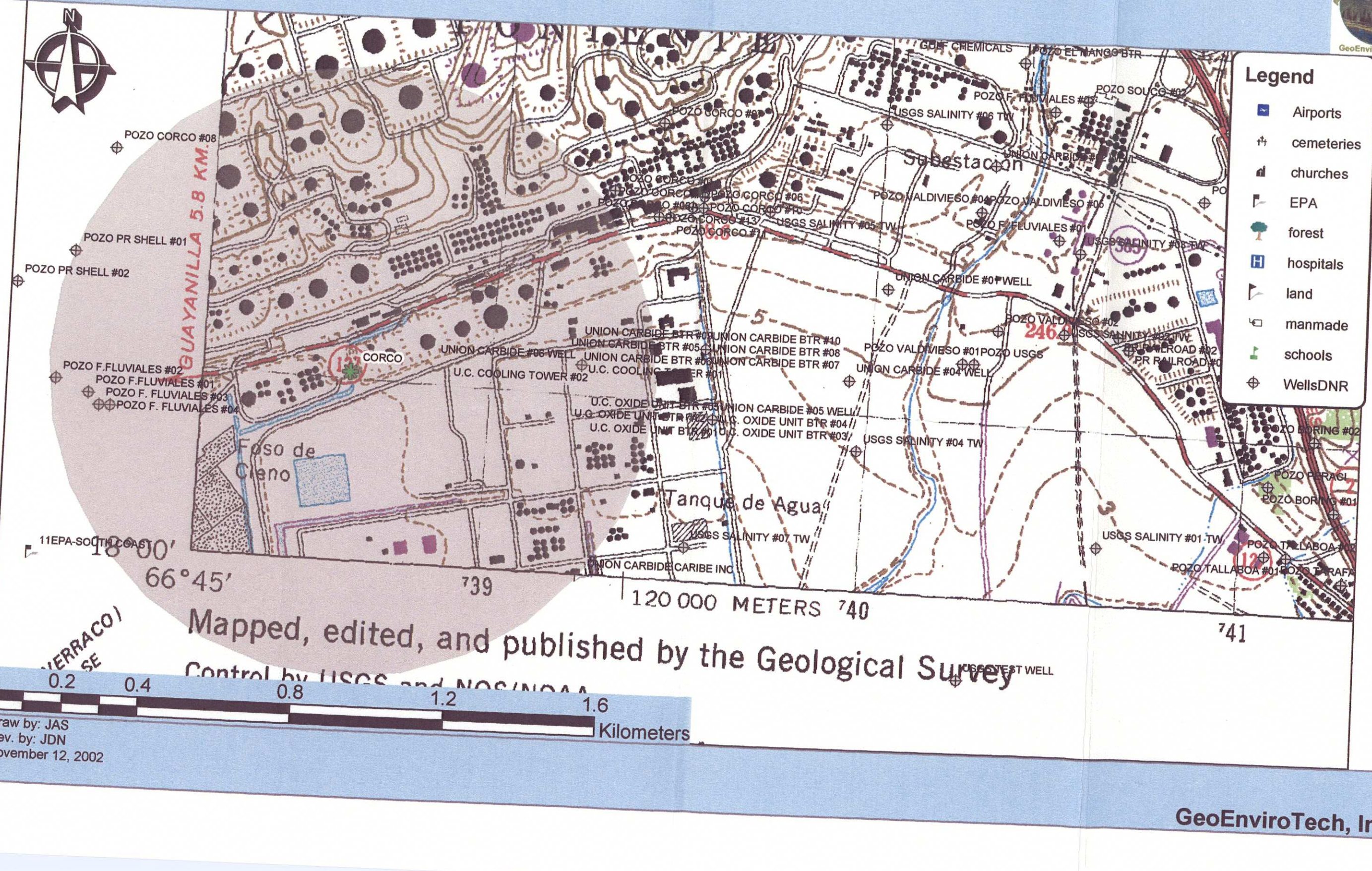
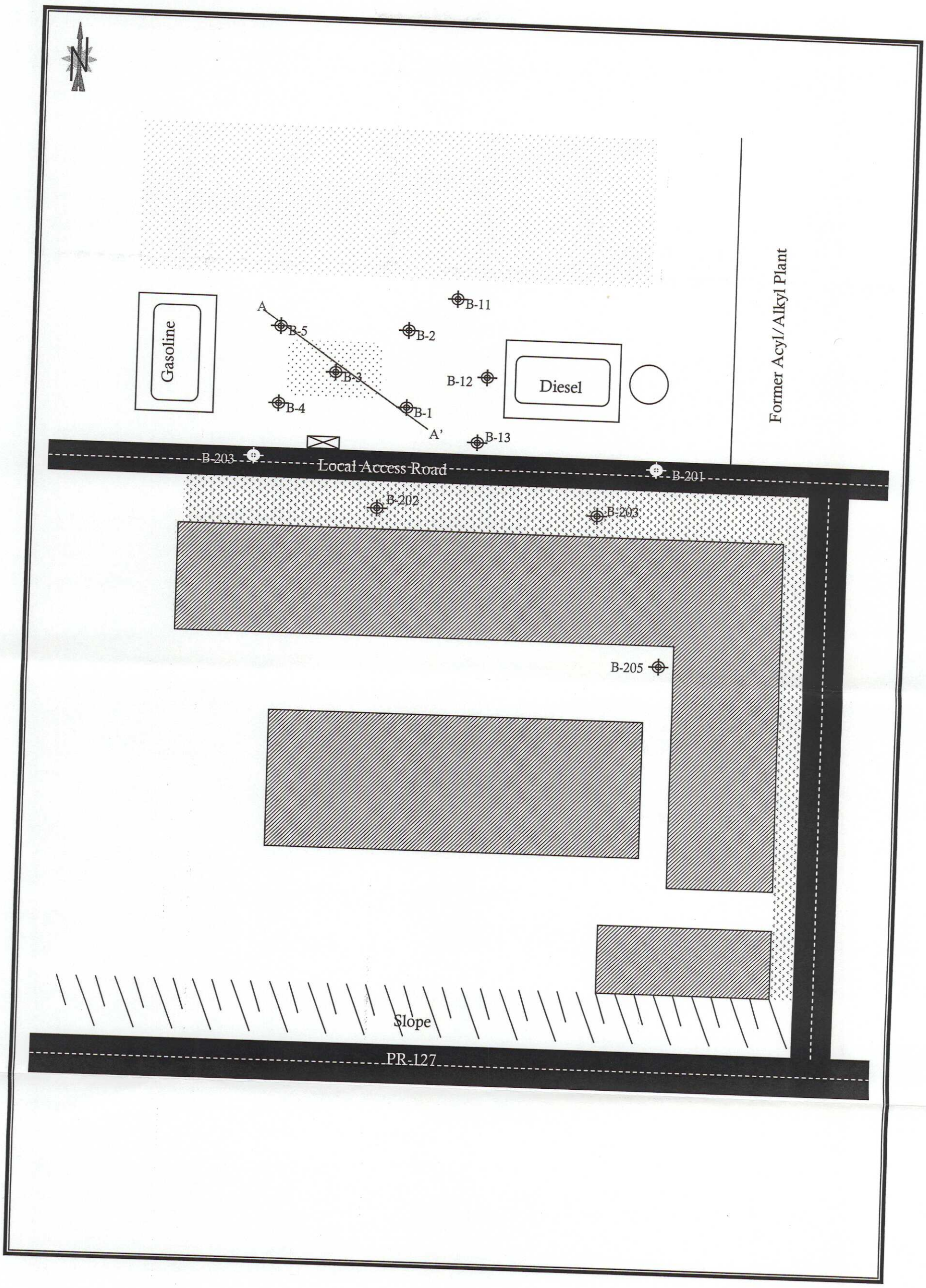


Figure 8.6
Receptors within a 0.8 kilometer radius
Commonwealth Oil Refinery Company
Peñuelas, PR

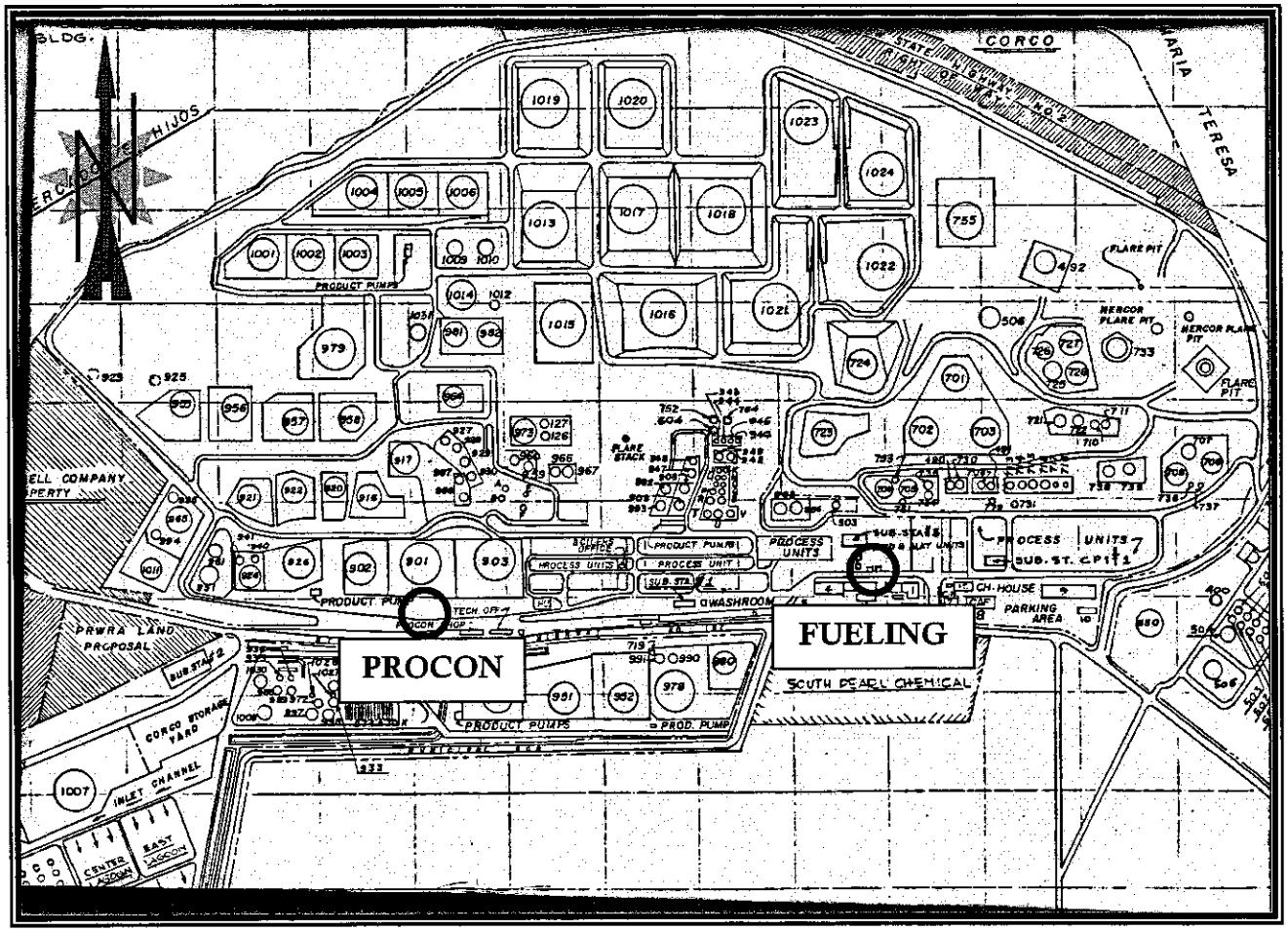


8.7 Boring Layout: FUELING Area
Commonwealth Oil Refinery Company
Peñuelas, Puerto Rico



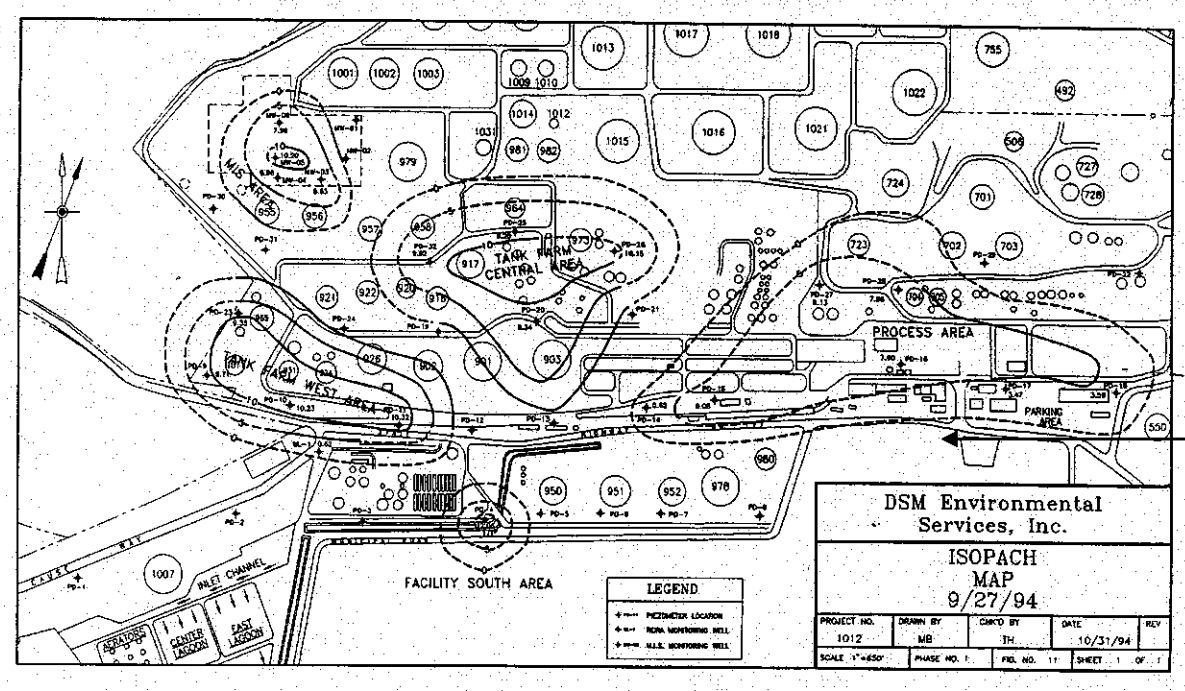
8.2 Site Layout

Commonwealth Oil Refinery Company
Peñuelas, Puerto Rico



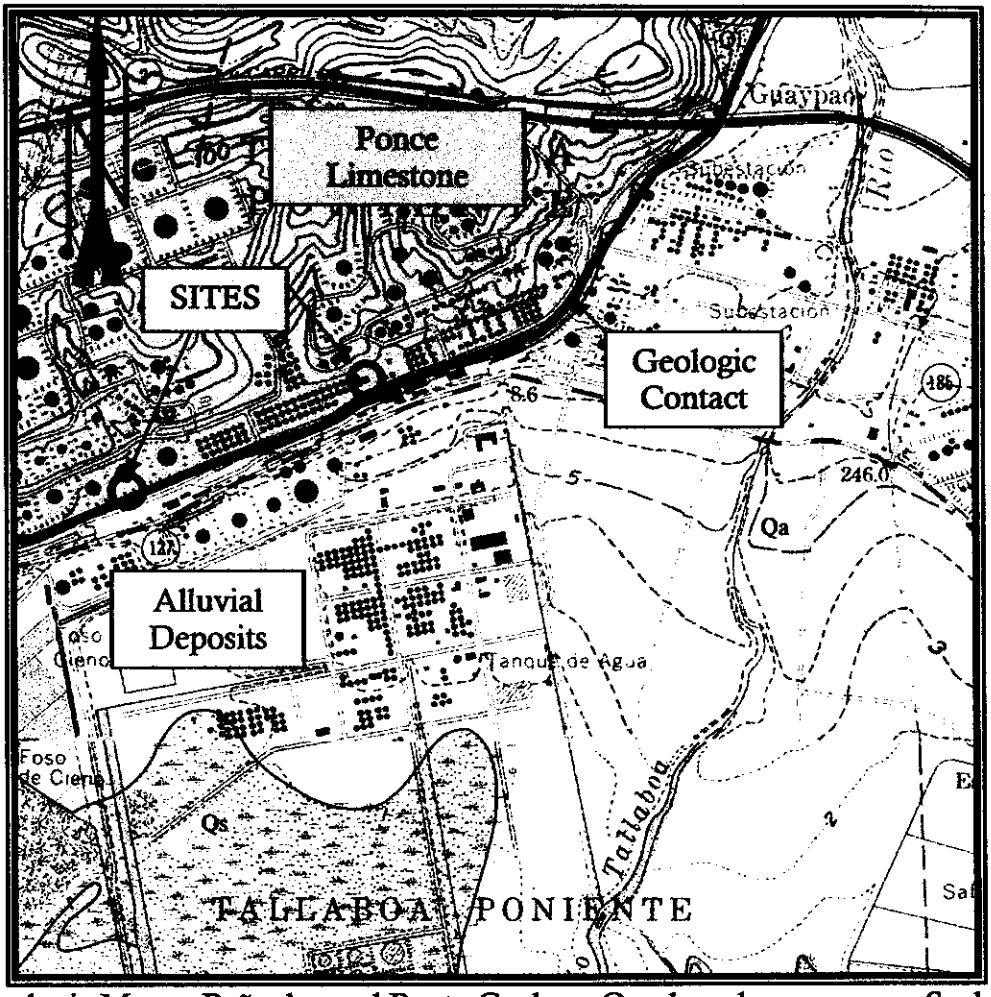
8.4 DMS Isopach Diagram

Commonwealth Oil Refinery Company
Peñuelas, Puerto Rico



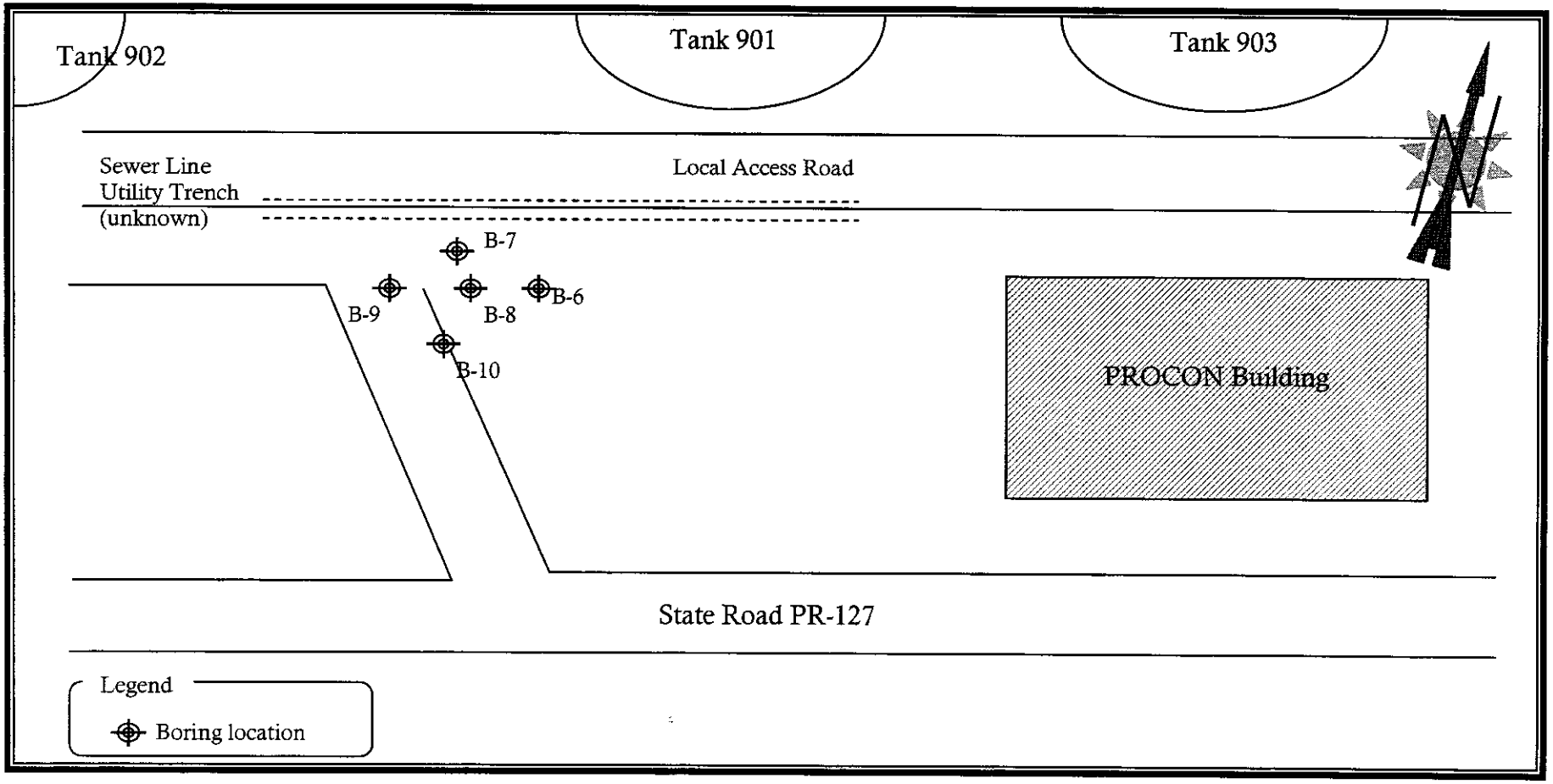
Hydraulic barrier between southeastern property boundary and road PR-127

8.5 Geologic Map
Commonwealth Oil Refinery Company
Peñuelas, Puerto Rico

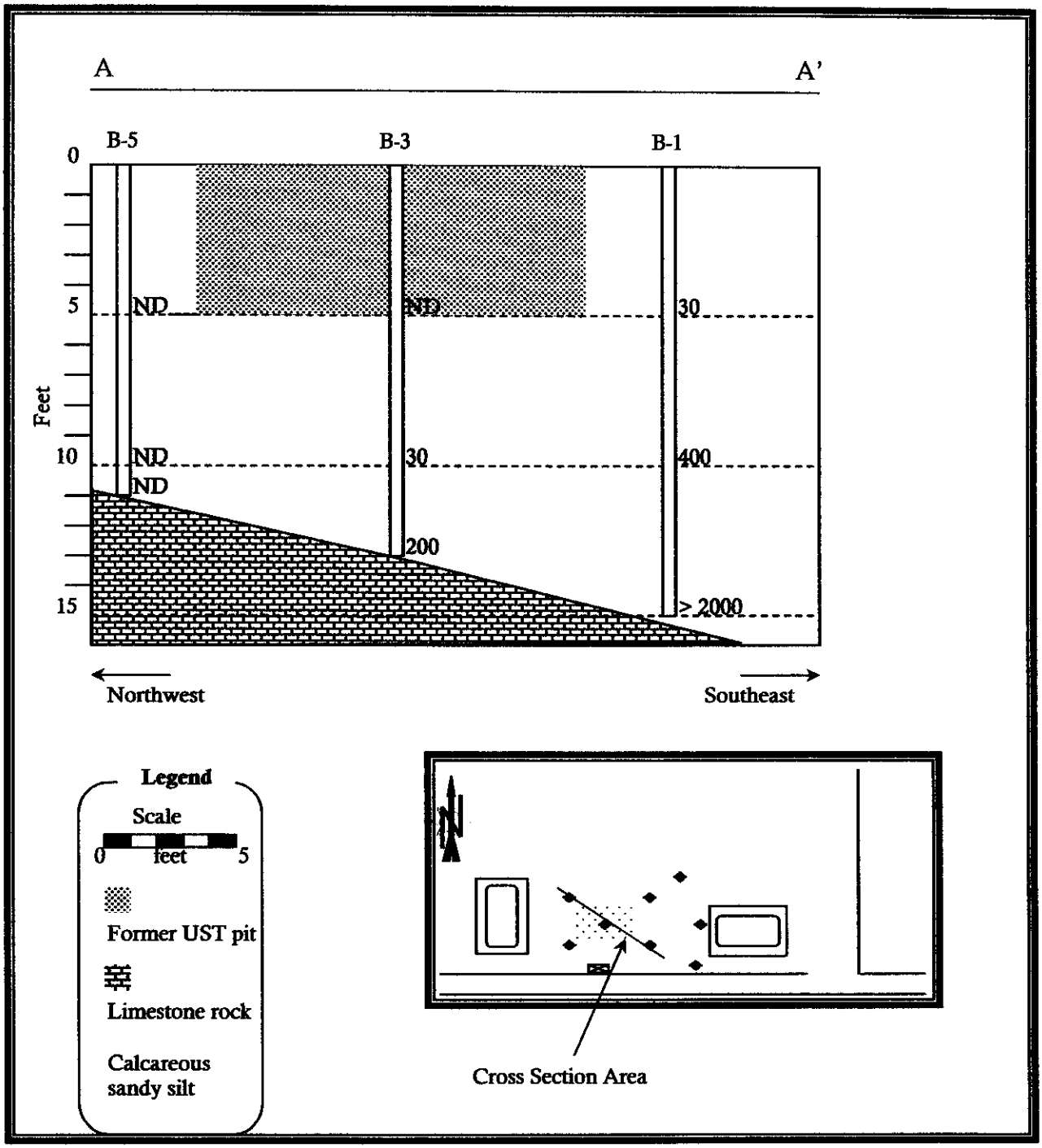


USGS Geologic Map Peñuelas and Punta Cuchara Quadrangle Scale: 1:20000

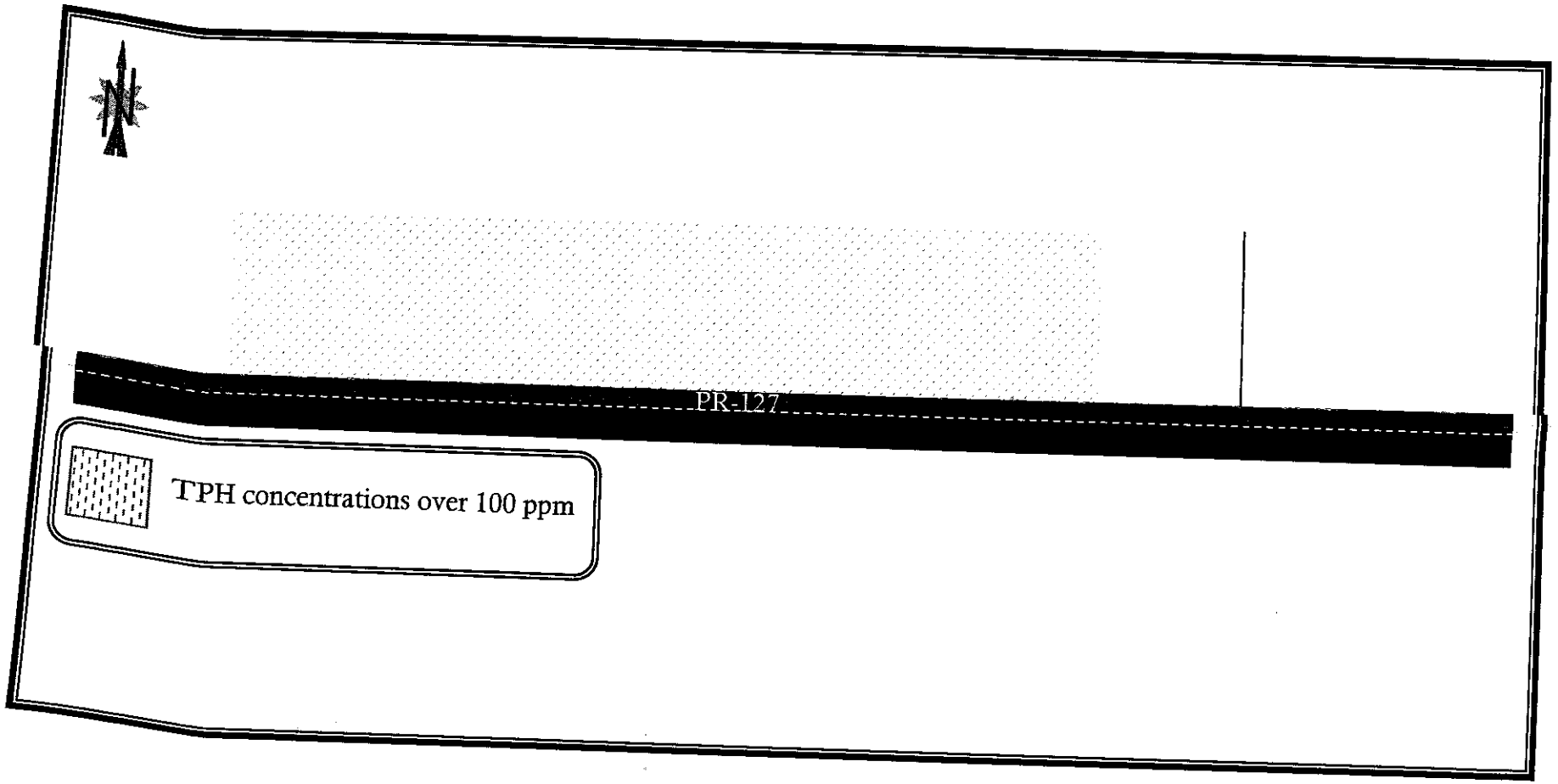
8.8 Boring Layout: PROCON Area
Commonwealth Oil Refinery Company
Peñuelas, Puerto Rico



8.9 Field Concentrations Cross Section Analysis at FUELING area
Commonwealth Oil Refinery Company
Peñuelas, Puerto Rico



8.10 **Inferred Contours at FUELING Area**
Commonwealth Oil Refinery Company
Peñuelas, Puerto Rico



TABLES

SOIL SAMPLING AT FORMER UST'S AREAS

Commonwealth Oil Refinery Company
Peñuelas, Puerto Rico

9.1 Subsoil description and field screening results
9.2 Laboratory Analysis Results – Gasoline and Diesel

9.1 Subsoil description and field screening results

Commonwealth Oil Refining Company
Peñuelas, Puerto Rico

Boring ID	Date	Time	Depth (feet)	OVA (ppm)	DT (ppm)	Lithology
FUELING AREA						
B-1	May 7, 2002	1125	0-5	28.1	30	Calcareous sand with occasional limestone fragments, 10YR 4/2 dark grayish brown and gray. Hydrocarbon odor.
		1145	5-10	911	400	
		1200	10-15	> 2000	> 2000	
B-2	May 7, 2002	1320	0-5	255	600	0'-5' calcareous sands and silts (UST pit fill), brown, followed by sandy silt with occasional limestone fragments. Hydrocarbon odor starts at 5 feet.
		1335	5-10	916	> 1000	
		1400	10-15	> 2000	> 2000	
B-3	May 7, 2002	1500	0-5	3.8	ND	Calcareous sand with occasional limestone fragments, 10YR 4/2 dark grayish brown and gray. Hydrocarbon odor. Limestone at 13 feet.
		1515	5-10	36	30	
		1550	10-13	162	200	
B-4	May 8, 2002	0900	0-5	ND	ND	0'-7' was calcareous sandy silt with occasional limestone fragments, 10YR 5/4 yellowish brown, followed by the same Lithology but gray in color. Limestone at 13 feet.
		0922	5-10	102	50	
		1010	10-13	198	60	
B-5	May 8, 2002	1050	0-5	1.9	ND	0'-11'calcareous sandy silt, occasional limestone fragments, brown to grayish brown. Limestone at 12 feet.
		1105	5-10	5.0	ND	
		1115	10-12	ND	ND	
B-11	May 9, 2002	1225	0-5	18.3	ND	Silty sand with occasional limestone fragments, brown, very little moisture. Same lithology through boring but gray since 8 feet below existing grade.
		1245	5-10	35.1	ND	
		1250	10-15	38	ND	
B-12	May 9, 2002	1310	0-5	116	30	Silty sand with occasional limestone fragments, brown, very little moisture. Same lithology through boring but gray since 8 feet below existing grade.
		1325	5-10	21.6	< 30	
		1335	10-15	53.0	30	
B-13	May 9, 2002	1400	0-5	21.5	ND	Silty sand with occasional limestone fragments, brown, very little moisture. Same lithology through boring but gray since 8 feet below existing grade.
		1410	5-10	411	1000	
		1425	10-15	57.6	30	
B-201	September 18, 2002	1055	0-5	ND	150	0'-7' Clayey Silt with occasional gravel, 7.5YR 4/4 brown calcareous silt; 7'-13' very moist else very pale brown; 17'-19' gray, moist; 22'-29.5' silty clay; 30' clayey sand and gravel, tip wet, hydrocarbon odor, gray.
		1120	5-10	ND	150	
		1130	10-15	ND	ND	
		1140	15-20	ND	ND	
		1150	20-25	69.9	200	

Boring ID	Date	Time	Depth (feet)	OVA (ppm)	DT (ppm)	Lithology
		1205	25-30	100	350	
B-202	September 18, 2002	1352	0-5	ND	ND	0'-7' clayey silt, brown then calcareous silt with limestone fragments, pale brown; 7'-11' clayey silt, moist; 11'-24.5' calcareous silt with limestone fragments; 24.5'-30' some gray staining, mild hydrocarbon odor.
		1400	5-10	ND	ND	
		1415	10-15	ND	ND	
		1425	15-20	ND	ND	
		1435	20-25	ND	< 30	
		1450	25-30	31	200	
B-203	September 19, 2002	1012	0-5	ND	ND	3" asphalt, sandy silt with gravel to 4' then calcareous sandy silt, pale brown to 10.5' where limestone was found.
		1020	5-11	ND	< 30	
B-204	September 19, 2002	1120	0-5	ND	ND	3" asphalt, sandy silt with gravel to 4' then calcareous sandy silt,; 9'-10.5' gray staining, pale brown. At 11.5' limestone was found.
		1145	5-10	ND	< 30	
		1310	10-11.5	5.3	100	
B-205	September 20, 2002	0920	0-5	ND	ND	2" concrete slab followed by moist silty clay and occasional gravel; 6'-14' pale brown silt trace fine sand; 14'-25'silty sand with occasional limestone fragments; 25'-28' clayey silt with occasional subrounded gravel, brown; 28'-30'clay, occasional gravel, very moist, gray staining.
		0942	5-10	10.7	150	
		0950	10-15	26.7	150	
		1000	15-20	51.5	100	
		1010	20-25	ND	< 30	
		1025	25-30	ND	ND	
PROCON AREA						
B-6	May 8, 2002	1400	0-5	6.0	ND	Calcareous sandy silt, occasional limestone fragments, yellowish brown until 13 feet when it changes to dark gray, moist and hydrocarbon odor.
		1415	5-10	ND	ND	
		1430	10-15	294	100	
B-7	May 8, 2002	1520	0-5	31.3	ND	Calcareous sandy silt, occasional limestone fragments, yellowish brown until 13 feet when it changes to dark gray, moist and hydrocarbon odor.
		1531	5-10	269	200	
		1540	10-15	715	600	
B-8	May 8, 2002	1550	0-5	ND	ND	Calcareous sandy silt, occasional limestone fragments, yellowish brown until 13.5 feet when it changes to dark gray, moist and hydrocarbon odor.
		1559	5-10	ND	ND	
		1610	10-15	130	50	
B-9	May 9, 2002	0845	0-5	ND	ND	0'-7' calcareous sandy silt with some clay occasional limestone fragments, 7.5YR 5/3 brown. 7'-9' Clay. 9'-15' sandy silt. At 14' gray stain, very moist.
		0900	5-10	ND	ND	
		0915	10-15	ND	ND	
B-10	May 9, 2002	0930	0-5	ND	ND	Calcareous sandy silt with occasional limestone fragments, light brown to brown. 7'-9'silty clay followed by calcareous sandy silt. Groundwater at 14'.
		0945	5-10	ND	ND	
		1000	10-15	ND	ND	

ND = Not Detected

ppm = parts per million

9.2 Laboratory Analysis Results – Gasoline and Diesel

Commonwealth Oil Refining Company
Peñuelas, Puerto Rico

Sample ID	Collection Date	TPH – GRO (mg/kg)	TPH – DRO (mg/kg)
FUELING Area			
B-1 @ 10'-15'	May 7, 2002	19000	--
B-2 @ 10'-15'	May 7, 2002	1100	--
B-3 @ 10'-13'	May 7, 2002	470	--
B-4 @ 10'-13'	May 8, 2002	ND	--
B-5 @ 10'-12'	May 8, 2002	ND	--
B-11 @ 10'-15'	May 9, 2002	ND	--
B-12 @ 0'-5'	May 9, 2002	ND	--
B-12 @ 10'-15'	May 9, 2002	ND	--
B-13 @ 5'-10'	May 9, 2002	ND	--
B-13 @ 10'-15'	May 9, 2002	1500	--
B-201	September 18, 2002	1800	--
B-202	September 18, 2002	60	--
B-203	September 19, 2002	ND	--
B-204	September 19, 2002	ND	--
B-205	September 20, 2002	2100	--
B-100	May 8, 2002	ND	--
B-210	September 19, 2002	ND	--
PROCON Area			
B-6 @ 10'-15'	May 8, 2002	--	5700
B-7 @ 10'-15'	May 8, 2002	--	4800
B-8 @ 10'-15'	May 8, 2002	--	4300
B-9 @ 10'-15'	May 9, 2002	--	ND
B-10 @ 10'-14'	May 9, 2002	--	ND
QA/QC SAMPLES (mg/L)			
TB	--	ND	--
FB-1	May 7, 2002	ND	--
FB-2	May 8, 2002	ND	--
FB-3	May 9, 2002	ND	--
EB-1	May 7, 2002	ND	--
EB-2	May 8, 2002	ND	ND
EB-3	May 9, 2002	ND	ND
TB-091802	September 18, 2002	ND	--
EB-091802	September 18, 2002	ND	--
FB-091802	September 18, 2002	ND	--
EB-091902	September 19, 2002	ND	--
FB-091902	September 19, 2002	ND	--
EB-092002	September 20, 2002	ND	--
FB-092002	September 20, 2002	ND	--
Detection Limit		10	25
EQB Regulatory Limit		100	100

B-100 is a duplicate of B-5
B-210 is a duplicate of B-203

APPENDIX
SOIL SAMPLING AT FORMER UST'S AREAS
Commonwealth Oil Refinery Company
Peñuelas, Puerto Rico

10.1 Certified Laboratory Results and Chains of Custody

On Site Labs, Inc.

PMB 627, HC-01 Box 29030, Caguas, PR 00725
Telephone 787-720-0329 Fax 787-789-3858

May 16, 2002
OSL Project #02I0509GET

Mr. Juan Negron
GeoEnviroTech
PMB 347
405 Ave. Esmeralda, Suite 2
Guaynabo, P.R. 00969-4457

SUBJECT: DATA REPORT – PROJECT NO. GET-02-053, CORCO FACILITY PENUELAS, PR

Dear Mr. Negron:

Please find enclosed the data report for samples collected by GET staff from the above referenced project site and delivered to On Site Lab's facility under the proper chain-of-custody protocol. A Puerto Rico-certified chemist performed the following analyses:

- 16 soil samples analyzed for TPH-GRO or DRO by modified EPA test method 8015B.
- 1 trip and 3 field blank water samples analyzed for TPH-GRO.
- 2 equipment blank water samples analyzed for TPH-GRO/DRO.
- 1 equipment blank water sample analyzed for TPH-GRO.
- Laboratory QA/QC analyses for TPH-GRO/DRO.

The results of the analyses are summarized in the attached tables. Applicable detection limits, QA/QC data, chromatograms, and a chain-of-custody are also included as attachments.

Please note that samples B-7 and B-8 also contained gasoline compounds in addition to the diesel components. Per the chain-of-custody, we only quantitated on the diesel range organics and not the gasoline range.

On Site Labs appreciates the opportunity to provide analytical services for this project. If you have any questions relating to the data or report, please do not hesitate to contact us.

Sincerely,
On Site Labs, Inc.

Kevin Shelburne
Principal

Attachments

On Site Labs, Inc.

PMB 627, HC-01 Box 29030, Caguas, PR 00725
Telephone 787-720-0329 Fax 787-789-3858

GEOENVIROTECH, INC.
PROJECT NO. GET-02-053
CORCO FACILITY
PENUELAS, PR

OSL Project #02I0509GET

TPH (Mod. EPA Method 8015B) ANALYSES OF SOIL

SAMPLE NUMBER	DATE ANALYZED	TPH-GRO C_5 - C_{12} (mg/Kg)	TPH-DRO C_{13} - C_{24} (mg/Kg)
METHOD BLANK	05/13/02	ND	ND
METHOD BLANK	05/14/02	ND	ND
B - 1 @ 10'-15'	05/13/02	**19,000**	----
B - 2 @ 10'-15'	05/13/02	**1,100**	----
B - 3 @ 10'-13'	05/13/02	**470**	----
B - 4 @ 10'-13'	05/13/02	ND	----
B - 5 @ 10'-12'	05/13/02	ND	----
B - 6 @ 10'-15'	05/14/02	----	**5,700**
B - 7 @ 10'-15'	05/14/02	----	**4,800**
B - 8 @ 10'-15'	05/14/02	----	**4,300**
B - 9 @ 10'-15'	05/14/02	----	ND
B - 10 @ 10'-14'	05/14/02	----	ND
B -11 @ 10'-15'	05/13/02	ND	----
B - 12 @ 0'-5'	05/13/02	ND	----
B - 12 @ 10'-15'	05/13/02	ND	----
B - 13 @ 5'-10'	05/13/02	ND	----
B - 13 @ 10'-15'	05/14/02	**1,500**	----
B - 100	05/13/02	ND	----
DETECTION LIMIT (mg/Kg)		10	25

mg/Kg = MILLIGRAMS PER KILOGRAM
CONCENTRATIONS BASED ON DRY WEIGHT
"ND" INDICATES ANALYTE NOT DETECTED AT OR ABOVE THE LISTED DETECTION LIMIT
SAMPLING PERFORMED BY: GET PERSONNEL
ANALYSES PERFORMED BY: MARCO A. PEDRAZA
DATA REVIEWED BY: KEVIN SHELBURNE

GEOENVIROTECH, INC.
PROJECT NO. GET-02-053
CORCO FACILITY
PENUELAS, PR

OSL Project #02I0509GET

TPH (Mod. EPA Method 8015B) ANALYSES OF WATER

SAMPLE NUMBER	DATE ANALYZED	TPH-GRO C_5 - C_{12} (mg/L)	TPH-DRO C_{13} - C_{24} (mg/L)
METHOD BLANK	05/13/02	ND	ND
METHOD BLANK	05/14/02	ND	ND
TB	05/13/02	ND	----
FB-1	05/14/02	ND	----
FB-2	05/14/02	ND	----
FB-3	05/14/02	ND	----
EB-1	05/14/02	ND	----
EB-2	05/14/02	ND	ND
EB-3	05/14/02	ND	ND
DETECTION LIMIT (mg/L)		10	25

mg/L = MILLIGRAMS PER LITER
"ND" INDICATES ANALYTE NOT DETECTED AT OR ABOVE THE LISTED DETECTION LIMIT
SAMPLING PERFORMED BY: GET PERSONNEL
ANALYSES PERFORMED BY: MARCO A. PEDRAZA
DATA REVIEWED BY: KEVIN SHELBURNE

Marco A. Pedraza, Laboratory Manager

Kevin Shelburne, Principal

On Site Labs, Inc. PMB 627, HC-01 Box 29030, Caguas, PR 00725
Telephone 787-720-0329 Fax 787-789-3858

QA/QC REPORT - CALIBRATION DATA

OSL Project #0210509GET

DAILY CALIBRATION DATE: 05/13/02

GEOENVIROTECH, INC. PROJECT NO. GET-02-053

PROJECT NAME: CORCO, PENUELAS

			INITIAL		OPENING			CLOSING		
COMPOUND	DETECTOR	CALIB RANGE	RF	%RSD	AREA	RF	%DIFF	AREA	RF	%DIFF
TPH GASOLINE	FID #2 (gc5)	10 - 30,000	0.26	18.8%	265.46	0.27	3.7%	51.87	0.26	1.3%
TPH GASOLINE	FID #3 (gc5)	10 - 30,000	0.36	16.8%	355.30	0.36	1.8%	72.09	0.36	0.4%
TPH GASOLINE	FID #4 (gc5)	10 - 30,000	0.31	18.8%	1164.66	0.29	4.8%	56.72	0.28	7.3%

CALIB RANGE - RANGE OF CALIBRATION CURVE IN ppm
INITIAL RF - AVERAGE RESPONSE FACTOR FROM MULTIPOINT CALIBRATION CURVE
% RSD - LINEARITY OF MULTIPOINT CALIBRATION CURVE (+/- 20% ACCEPTABLE LIMITS)
AREA - AREA COUNTS FROM DAILY CALIBRATION STANDARD
RF - DETECTOR RESPONSE FACTOR FROM MID-POINT CALIBRATION STANDARD
% DIFF - DIFFERENCE, IN PERCENT, BETWEEN THE AVERAGE RF AND THE OPENING OR CLOSING RF (+/- 15% ACCEPTABLE LIMITS)
OPENING - MID-POINT CALIBRATION STANDARD ANALYZED BEFORE SAMPLE ANALYSES BEGIN
CLOSING - MID-POINT CALIBRATION STANDARD ANALYZED AFTER SAMPLES ANALYSES ARE COMPLETE

ANALYSES PERFORMED BY: MARCO A. PEDRAZA
DATA REVIEWED BY: KEVIN SHELBURNE

ON SITE LABS, INC.
PMB 627, HC-01 BOX 29030, CAGUAS, P.R. 00725
TELEPHONE (787) 720-0329 FAX 789-3858

QA/QC REPORT - MS/MSD DATA

MATRIX SPIKE (MS)/MATRIX SPIKE DUPLICATE (MSD)

OSL Project #02I0509GET
DATE: 05/13/02

GEOENVIROTECH, INC. PROJECT NO. GET-02-053
PROJECT NAME: CORCO, PENUELAS

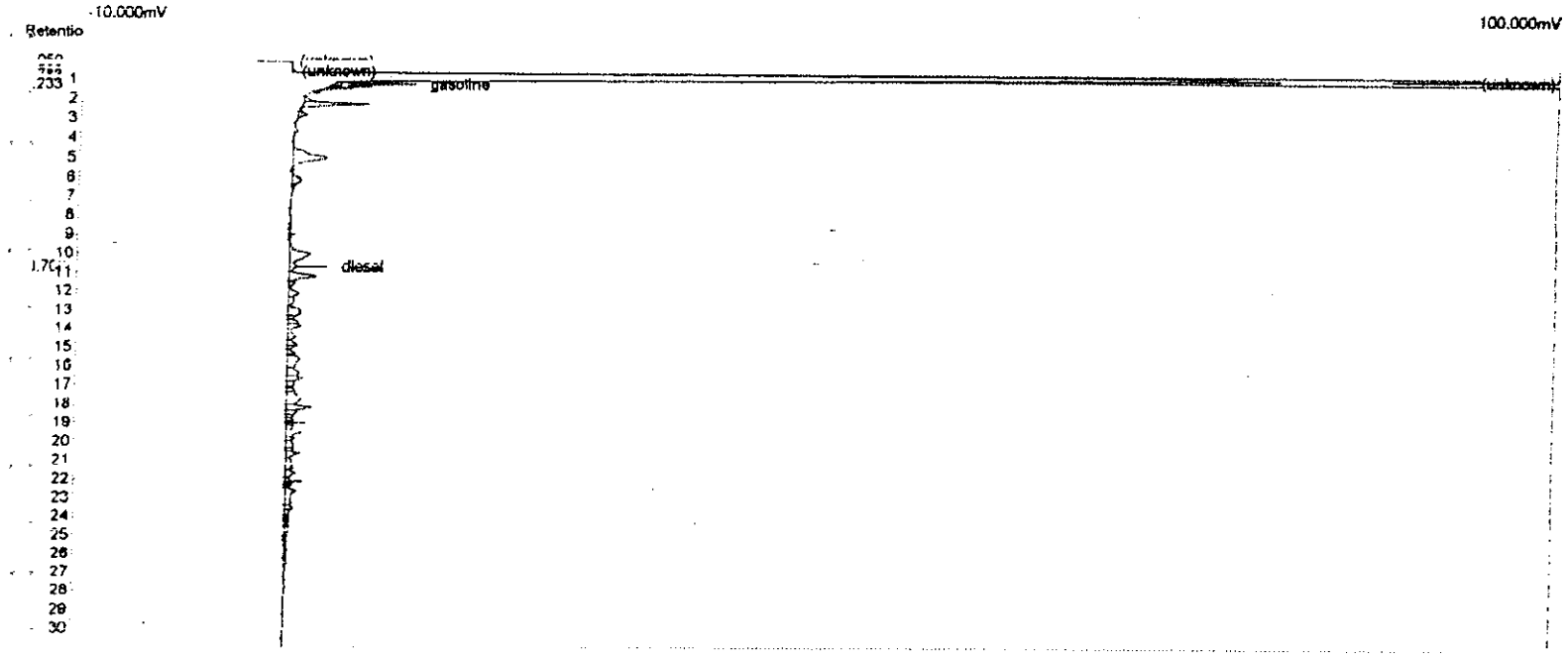
COMPOUND	SPK CON (ppm)	MS CONC (ppm)	%REC MS	MSD CONC (ppm)	%REC MSD	RPD	ACCEPTABLE RPD	ACCEPTABLE RECOVERY
TPH-GASOLINE	50	41	82%	40	80%	2%	15%	77% - 129%

ppm = PARTS PER MILLION
MS CONC - ANALYZED CONCENTRATION OF SPIKED SAMPLE
% REC - PERCENT RECOVERY OF SPIKE FROM MATRIX
RPD - RELATIVE PERCENT DIFFERENCE BETWEEN MATRIX SPIKE AND MATRIX SPIKE DUPLICATE RECOVERIES

ANALYSES PERFORMED BY: MARCO A. PEDRAZA
DATA REVIEWED BY: KEVIN SHELBURNE

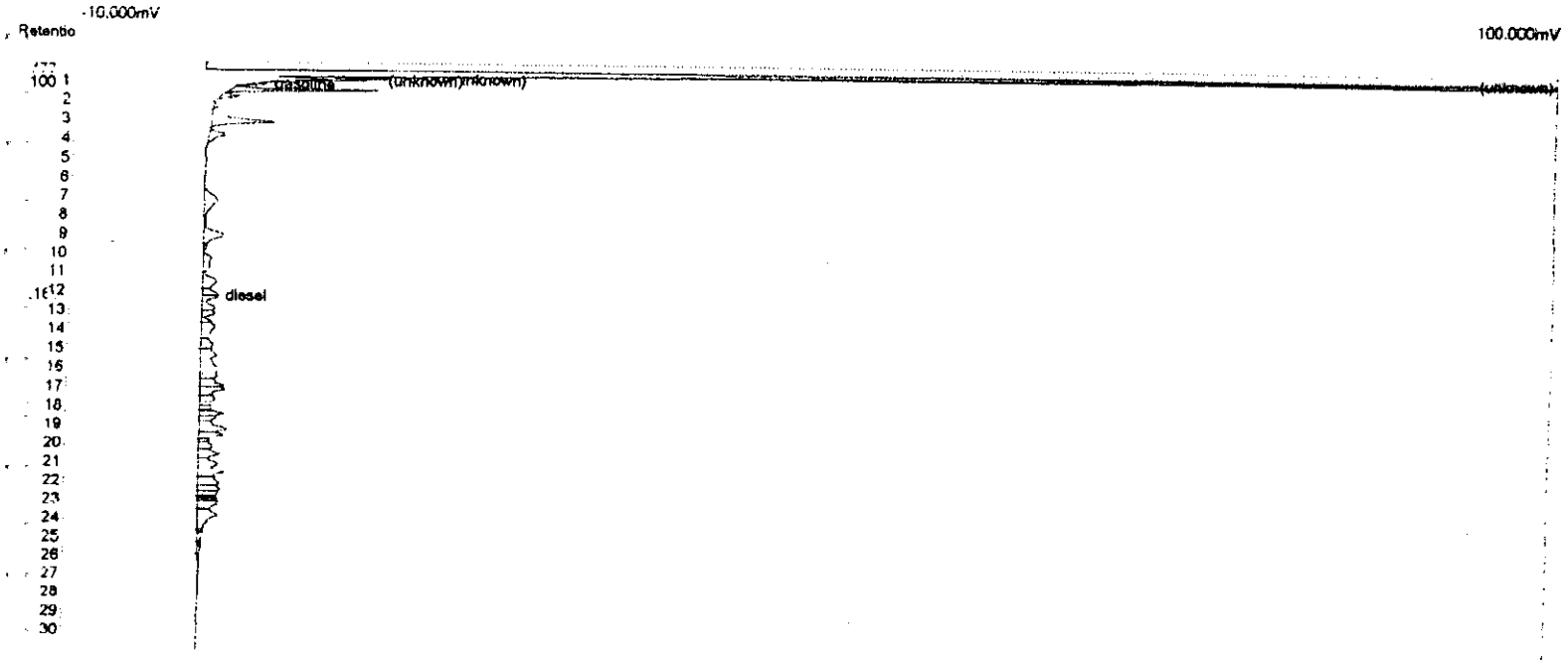
ON SITE LABS, INC.
PMB 627, HC-01 BOX 29030, CAGUAS, P.R. 00725
TELEPHONE (787) 720-0329 FAX 789-3858

Analysis date: 05/13/2002 12:15:44
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fb1.CHR ()
Sample: 250/250 ppm G/D open
Operator: MAP



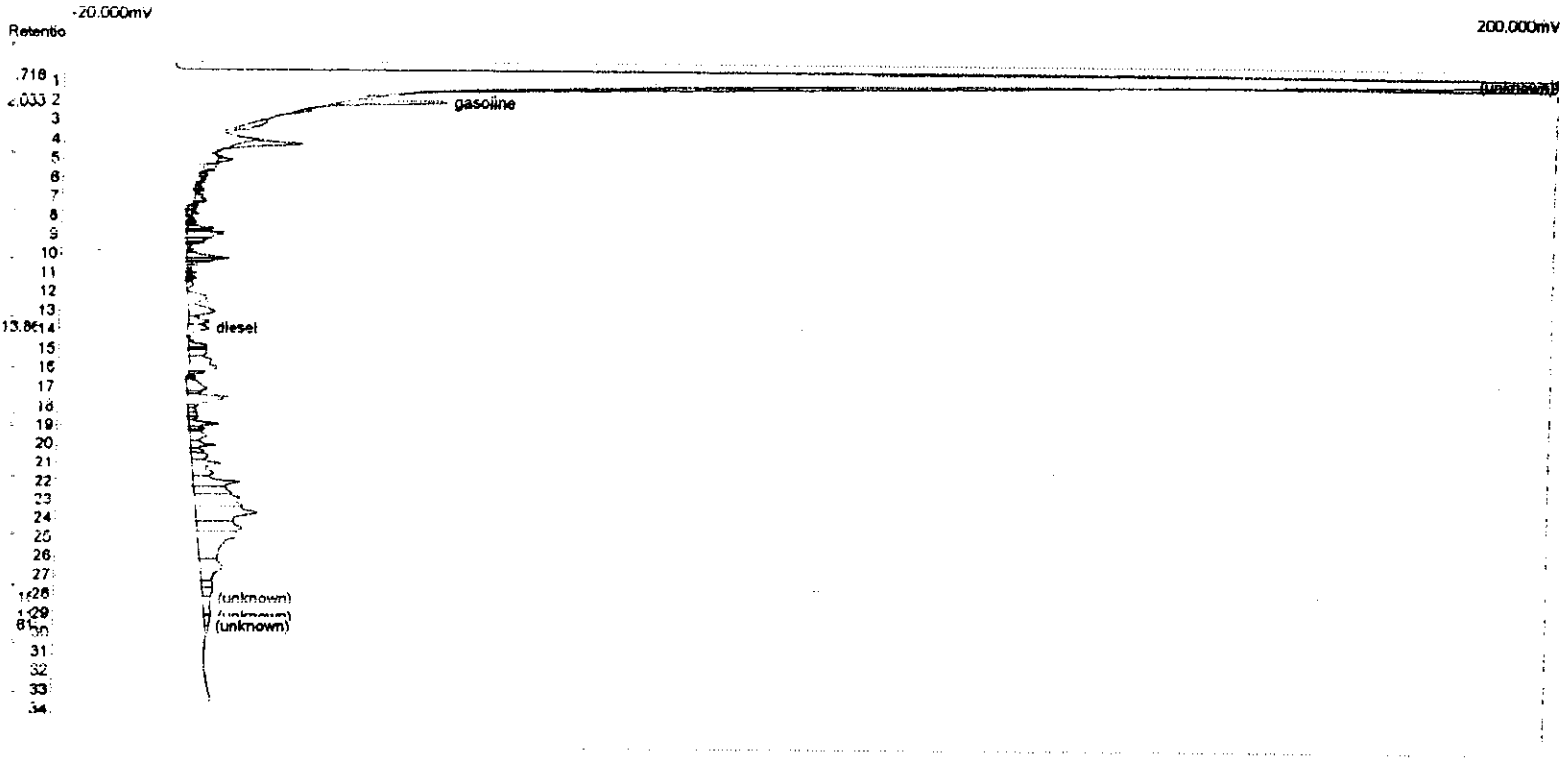
Component	Retention	Area	External	Units
ge ne	1.233	265.464	259.24	
diesel	10.700	614.981	221.53	ppm
		880.445	480.78	

Analysis date: 05/13/2002 12:15:44
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fc1.CHR ()
Sample: 250/250 ppm G/D open
Operator: MAP



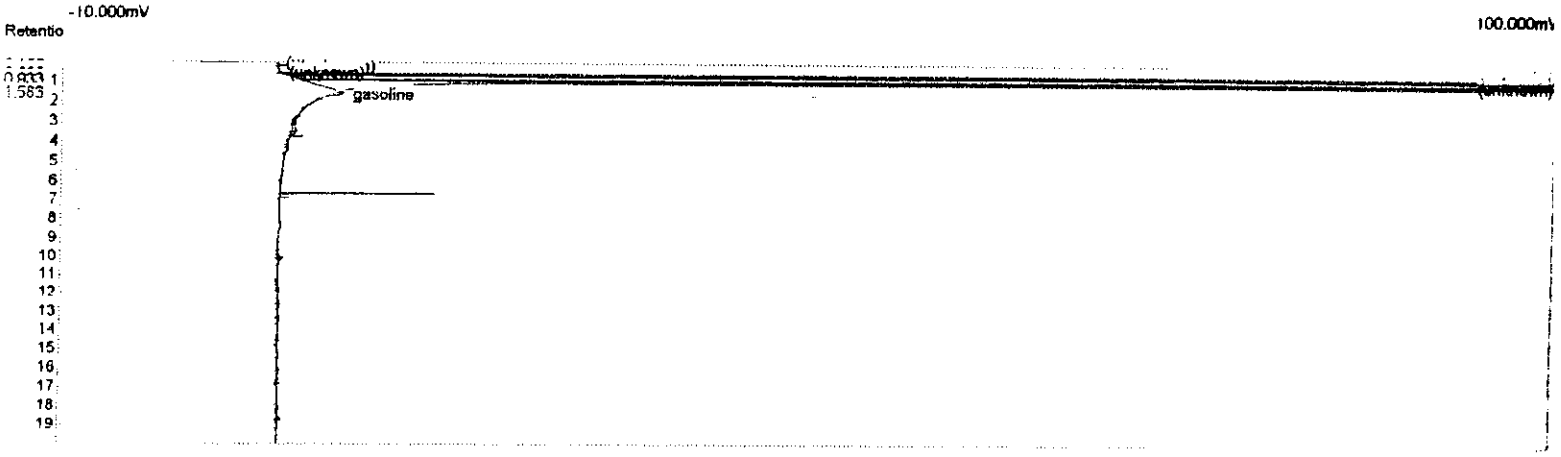
Component	Retention	Area	External	Units
e	1.100	355.304	245.38	
diesel	12.166	794.781	268.67	ppm
		1150.085	514.25	

Analysis date: 05/13/2002 14:17:26
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513FD4.chr ()
Sample: 1000/1000 ppm G/D open
Operator: MAF



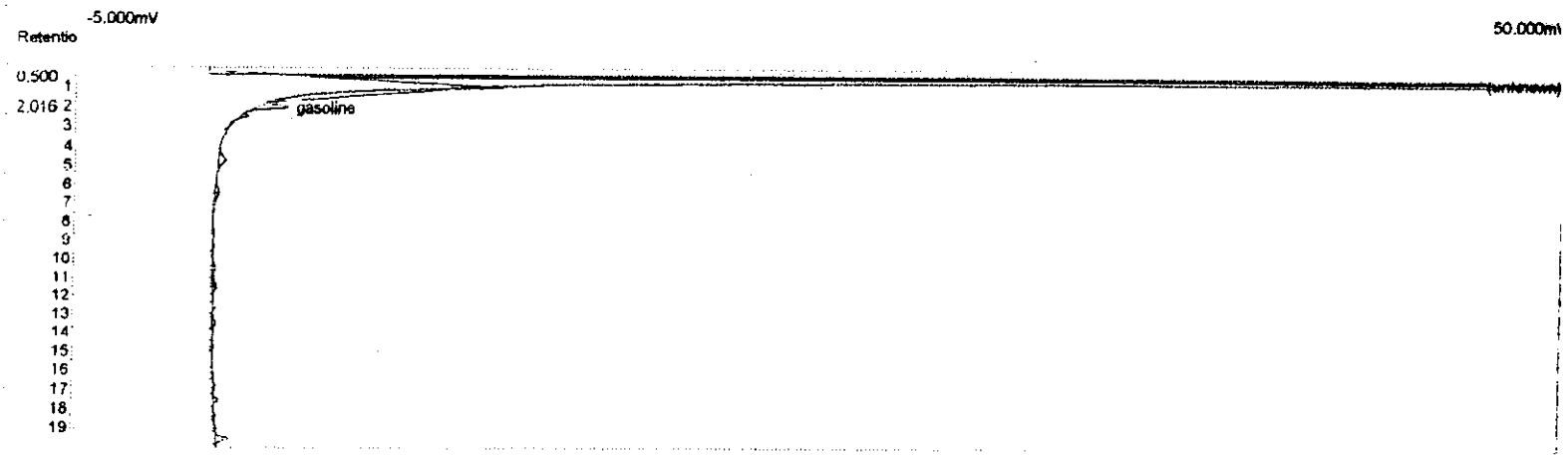
Component	Retention	Area	External	Units
soline	2.033	1164.655	951.52	
diesel	13.866	2677.619	1104.63	ppm
		3842.274	2056.14	

Lab name: On Site Labs Inc
Analysis date: 05/13/2002 17:29:11
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fb11.CHR ()
Sample: 50 ppm Gas close std
Operator: MAP



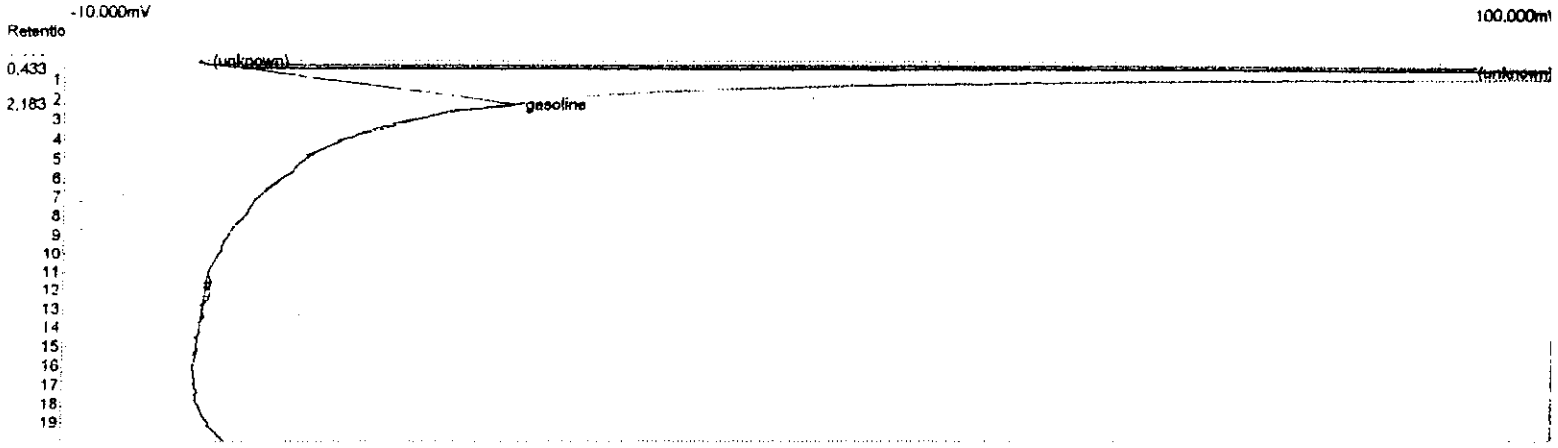
Component	Retention	Area	External	Units
gasoline	1.583	51.870	50.65	
		51.870	50.65	

Lab name: On Site Labs Inc
Analysis date: 05/13/2002 17:29:11
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fc11.CHR ()
Sample: 50 ppm Gas close std
Operator: MAP



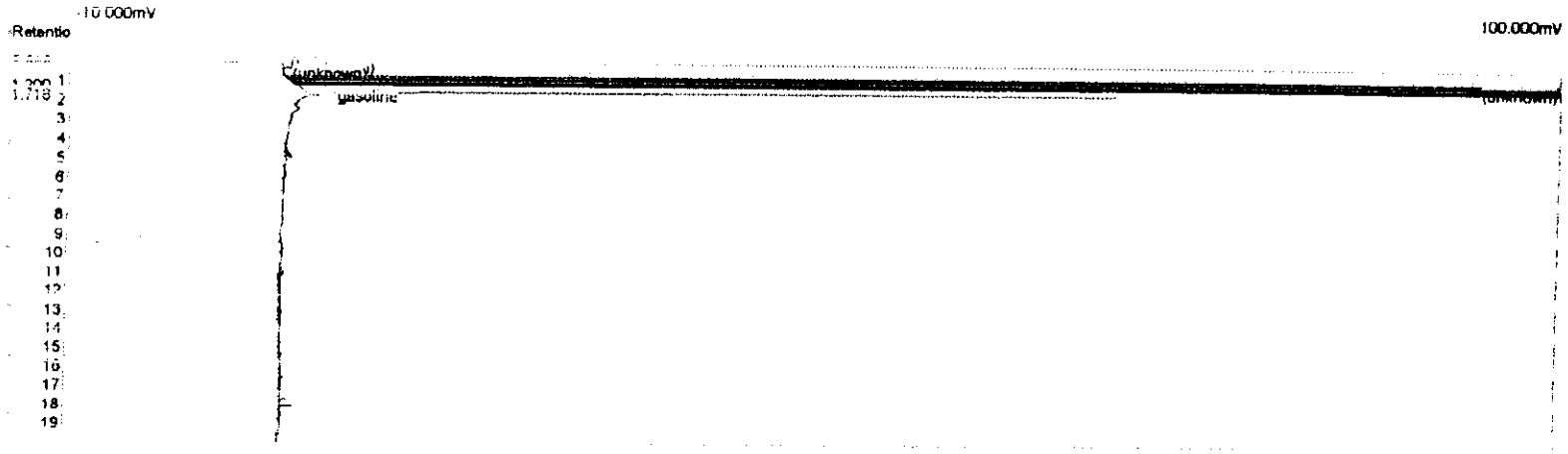
Component	Retention	Area	External	Units
gasoline	2.016	72.085	49.78	
		72.085	49.78	

Lab name: On Site Labs Inc
Analysis date: 05/13/2002 17:29:11
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fd11.CHR ()
Sample: 50 ppm Gas close std
Operator: MAP



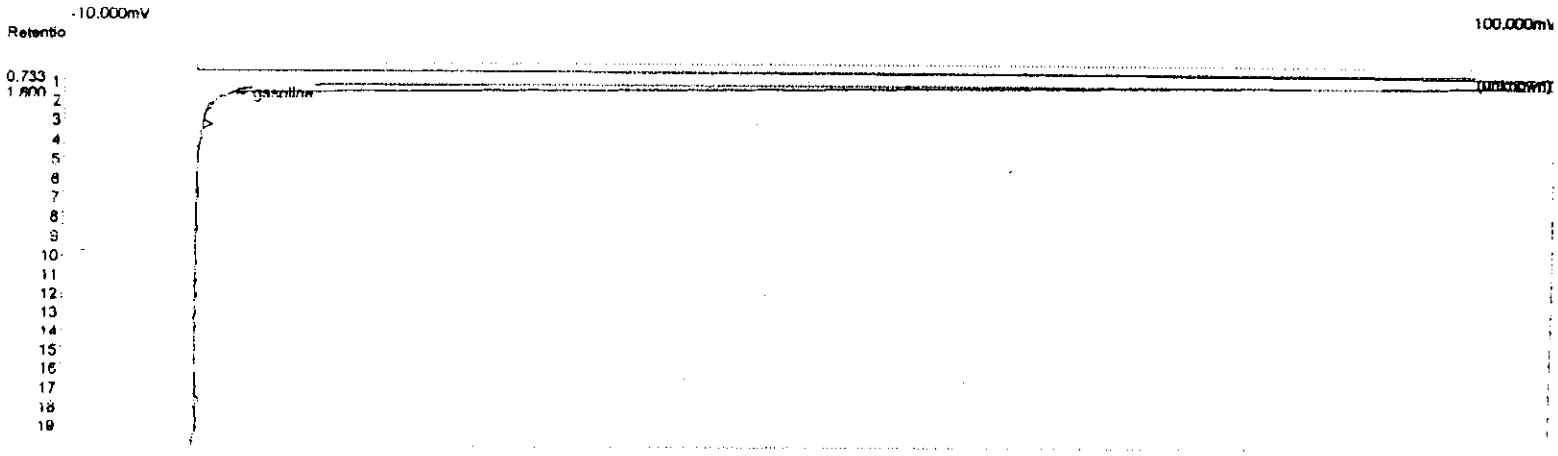
Component	Retention	Area	External	Units
gasoline	2.183	56.717	46.34	
		56.717	46.34	

Lab name: Chi Site Labs Inc
Analysis date: 05/13/2002 17:05:56
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fb10.CHR ()
Sample: blank matrix spike
Operator: MAP



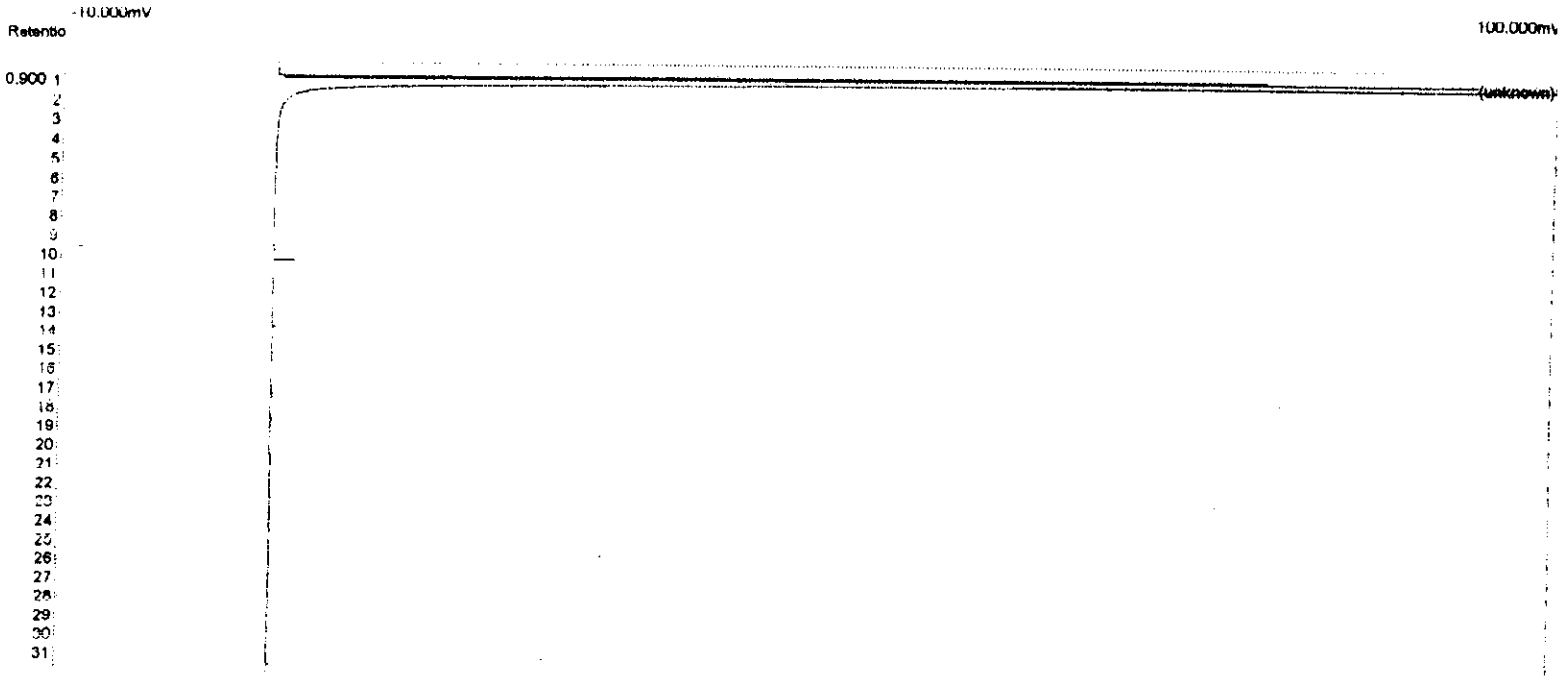
Component	Retention	Area	External	Units
gasoline	1.716	42.442	41.45	
		42.442	41.45	

Analysis date: 05/13/2002 17:05:56
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fc10.CHR ()
Sample: blank matrix spike duplicat
Operator: MAP



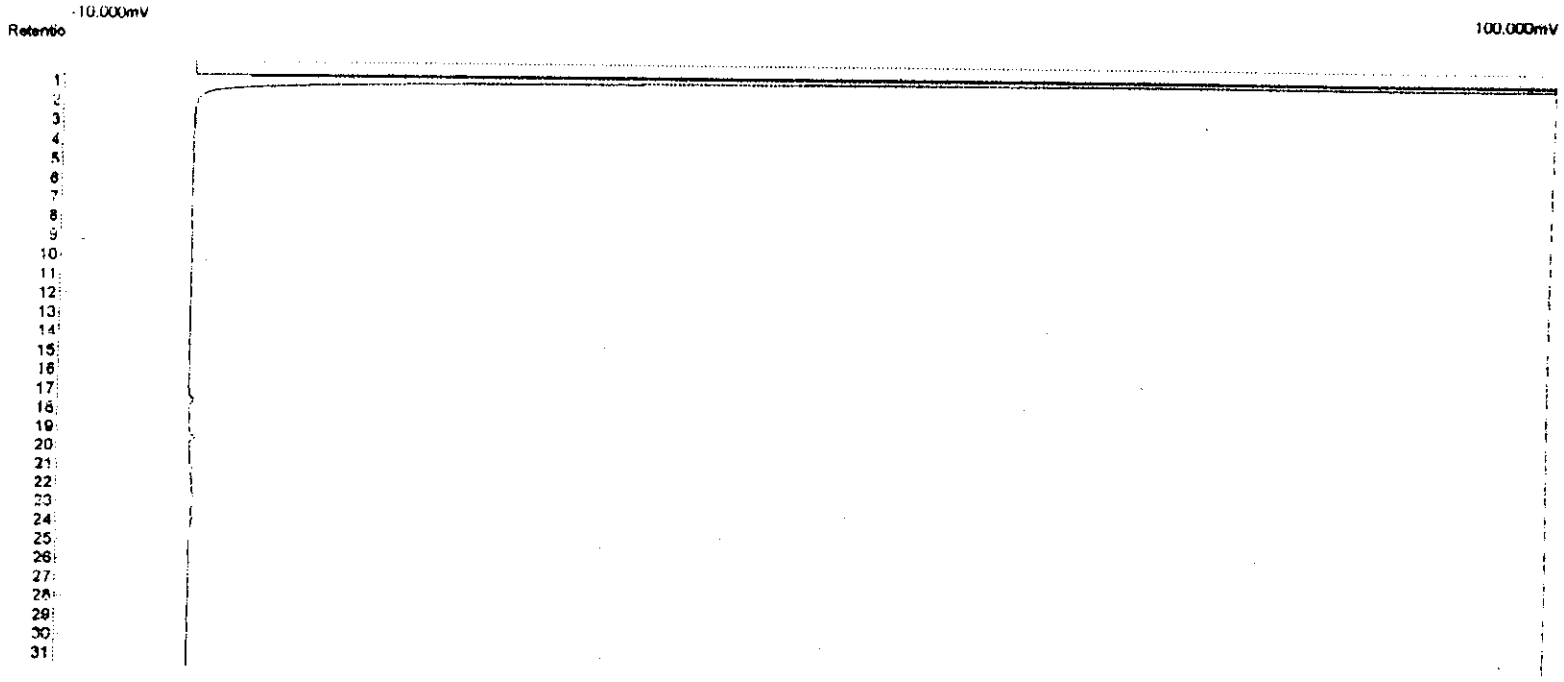
Component	Retention	Area	External	Units
gasoline	1.600	58.076	40.11	
		58.076	40.11	

Analysis date: 05/13/2002 13:10:15
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513FB2.chr ()
Sample: METHOD BLANK
Operator: MAP



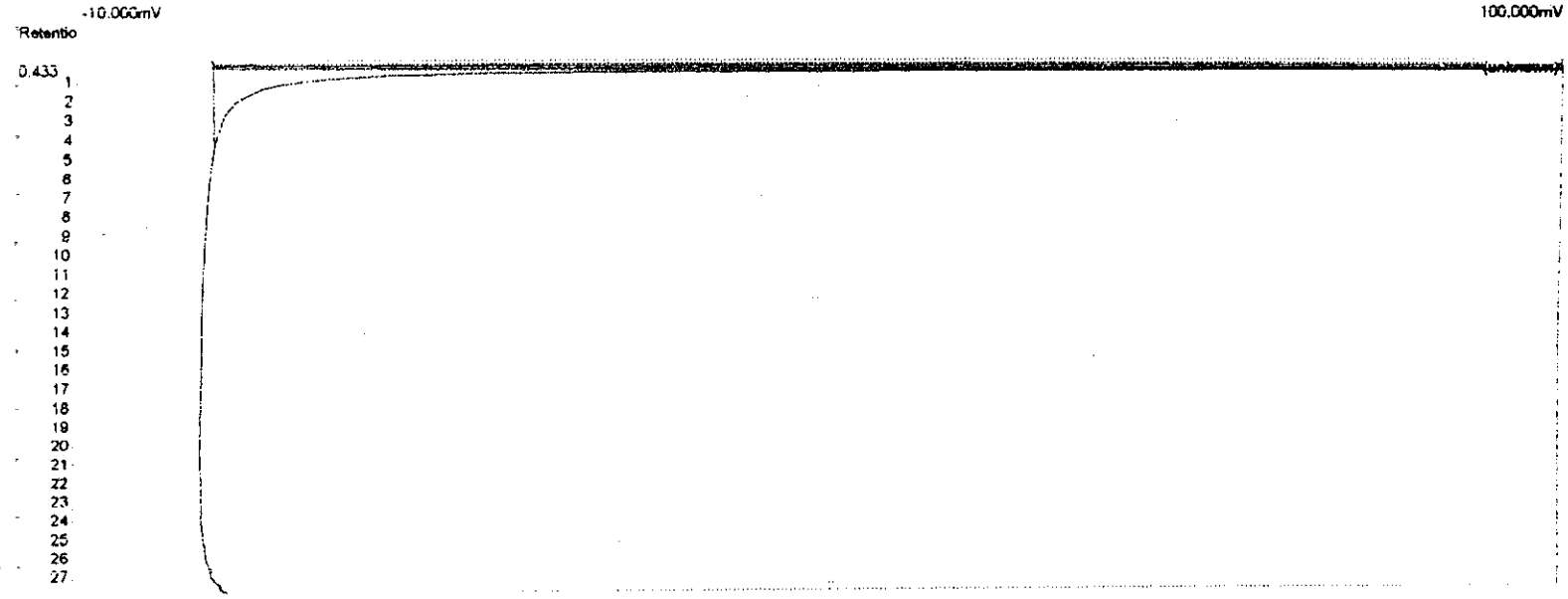
Component	Retention	Area	External	Units
		0.000	0.00	

Lab name: On Site Labs Inc
Analysis date: 05/13/2002 13:10:15
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513FC2.chr ()
Sample: METHOD BLANK
Operator: MAP



Component	Retention	Area	External	Units
		0.000	0.00	

Analysis date: 05/13/2002 14:53:47
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fd5.CHR ()
Sample: METHOD BLANK
Operator: MAP



Component	Retention	Area	External	Units
		0.000	0.00	

QA/QC REPORT - CALIBRATION DATA

OSL Project #02I0509GET
DAILY CALIBRATION DATE: 05/14/02

GEOENVIROTECH, INC. PROJECT NO. GET-02-053
PROJECT NAME: CORCO, PENUELAS

			INITIAL		OPENING			CLOSING		
COMPOUND	DETECTOR	CALIB RANGE	RF	%RSD	AREA	RF	%DIFF	AREA	RF	%DIFF
TPH GASOLINE	FID #2 (gc5)	10 - 30,000	0.26	18.8%	582.73	0.29	13.8%	96.05	0.24	6.2%
TPH GASOLINE	FID #3 (gc5)	10 - 30,000	0.36	16.8%	1376.72	0.34	4.9%	149.44	0.37	3.2%
TPH GASOLINE	FID #4 (gc5)	10 - 30,000	0.31	18.8%	2251.74	0.28	8.0%	649.19	0.32	6.1%
TPH DRO	FID #2 (gc5)	25 - 20,000	0.69	14.1%	1525.52	0.76	9.9%	482.01	0.60	13.2%
TPH DRO	FID #3 (gc5)	25 - 20,000	0.74	13.6%	2603.54	0.65	11.9%	642.52	0.80	8.7%
TPH DRO	FID #4 (gc5)	25 - 20,000	0.61	11.1%	5261.22	0.66	8.5%	2385.00	0.60	1.6%

CALIB RANGE - RANGE OF CALIBRATION CURVE IN ppm
INITIAL RF - AVERAGE RESPONSE FACTOR FROM MULTIPOINT CALIBRATION CURVE
% RSD - LINEARITY OF MULTIPOINT CALIBRATION CURVE (+/- 20% ACCEPTABLE LIMITS)
AREA - AREA COUNTS FROM DAILY CALIBRATION STANDARD
RF - DETECTOR RESPONSE FACTOR FROM MID-POINT CALIBRATION STANDARD
% DIFF - DIFFERENCE, IN PERCENT, BETWEEN THE AVERAGE RF AND THE OPENING OR CLOSING RF (+/- 15% ACCEPTABLE LIMITS)
OPENING - MID-POINT CALIBRATION STANDARD ANALYZED BEFORE SAMPLE ANALYSES BEGIN
CLOSING - MID-POINT CALIBRATION STANDARD ANALYZED AFTER SAMPLES ANALYSES ARE COMPLETE

ANALYSES PERFORMED BY: MARCO A. PEDRAZA
DATA REVIEWED BY: KEVIN SHELBURNE

ON SITE LABS, INC.
PMB 627, HC-01 BOX 29030, CAGUAS, P.R. 00725
TELEPHONE (787) 720-0329 FAX 789-3858

QA/QC REPORT - MS/MSD DATA

MATRIX SPIKE (MS)/MATRIX SPIKE DUPLICATE (MSD)

OSL Project #02I0509GET
DATE: 05/14/02

GEOENVIROTECH, INC. PROJECT NO. GET-02-053
PROJECT NAME: CORCO, PENUELAS

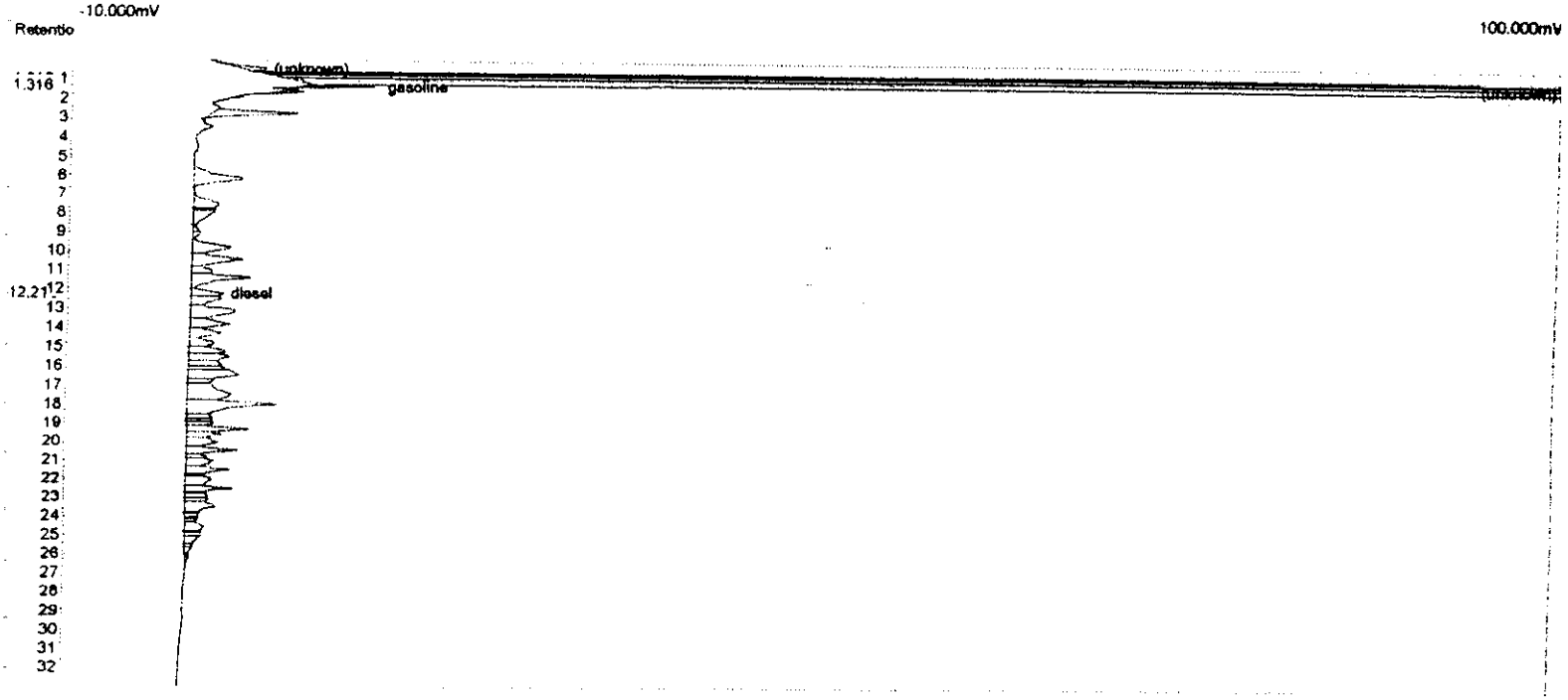
COMPOUND	SPK CON (ppm)	MS CONC (ppm)	%REC MS	MSD CONC (ppm)	%REC MSD	RPD	ACCEPTABLE RPD	ACCEPTABLE RECOVERY
TPH-GASOLINE	500	486	97%	479	96%	1%	15%	77% - 129%
TPH-DRO	500	457	91%	436	87%	5%	15%	74% - 131%

ppm = PARTS PER MILLION
MS CONC - ANALYZED CONCENTRATION OF SPIKED SAMPLE
% REC - PERCENT RECOVERY OF SPIKE FROM MATRIX
RPD - RELATIVE PERCENT DIFFERENCE BETWEEN MATRIX SPIKE AND MATRIX SPIKE DUPLICATE RECOVERIES

ANALYSES PERFORMED BY: MARCO A. PEDRAZA
DATA REVIEWED BY: KEVIN SHELBURNE

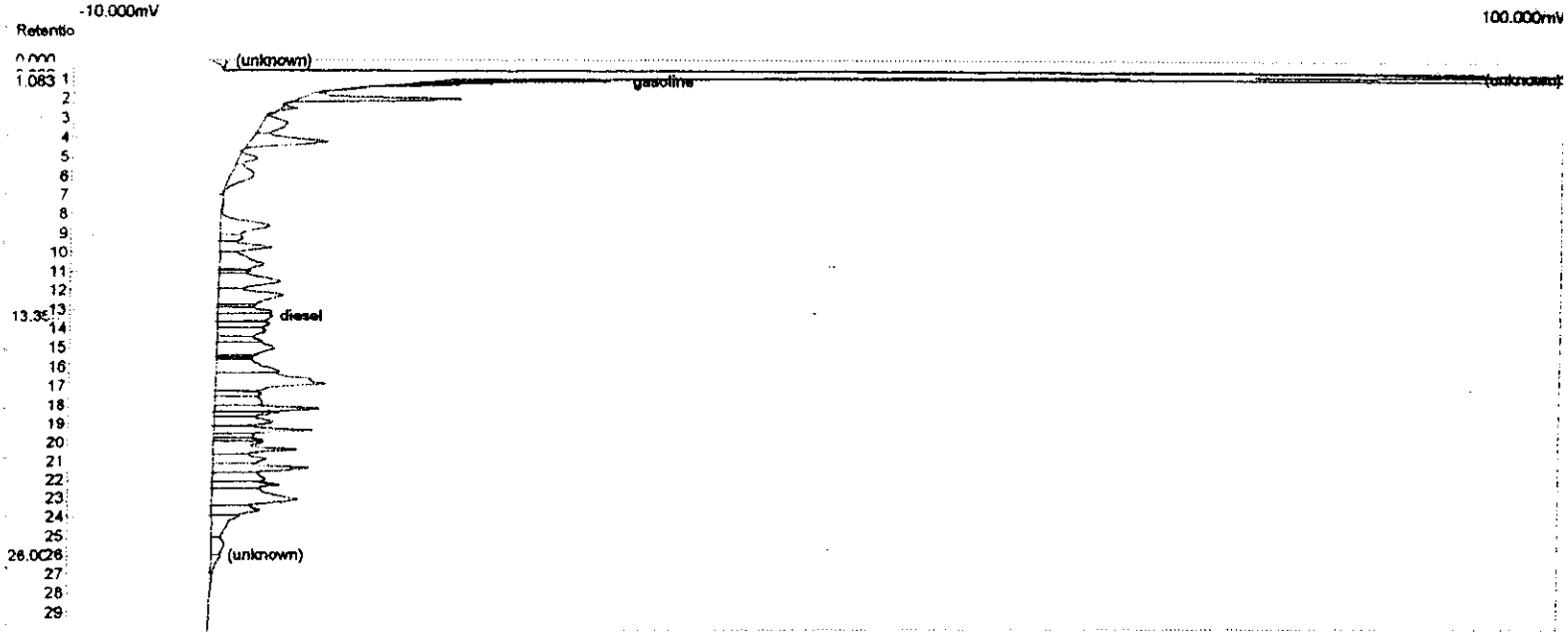
ON SITE LABS, INC.
PMB 627, HC-01 BOX 29030, CAGUAS, P.R. 00725
TELEPHONE (787) 720-0329 FAX 789-3858

Analysis date: 5/14/2002 10:15:03
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fb1.CHR ()
Sample: 500/500 ppm G/D open
Operator: MAP



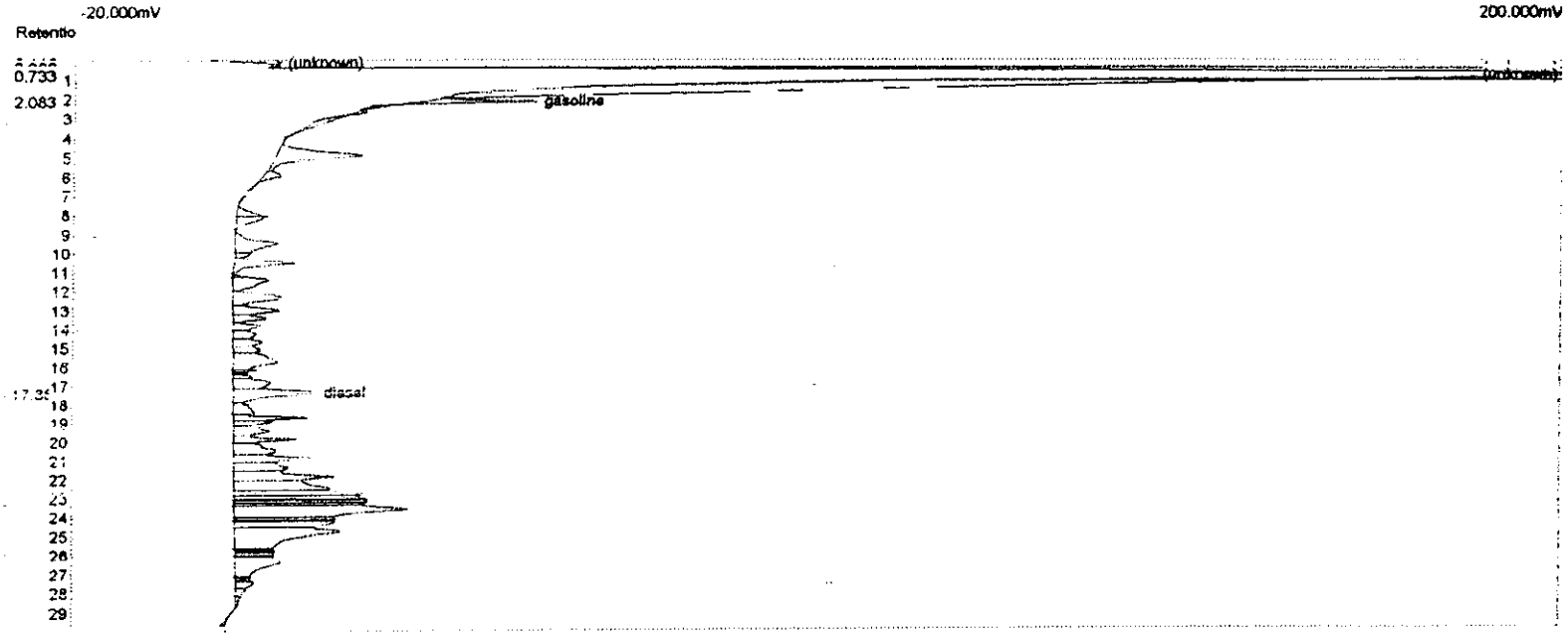
Component	Retention	Area	External	Units
gasoline	1.316	582.732	569.07	
diesel	12.216	1525.518	549.54	ppm
		2108.250	1118.61	

Analysis Date: 05/14/2002 10:15:03
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fc1.CHR ()
Sample: 1000/1000 ppm G/D open
Operator: MAP



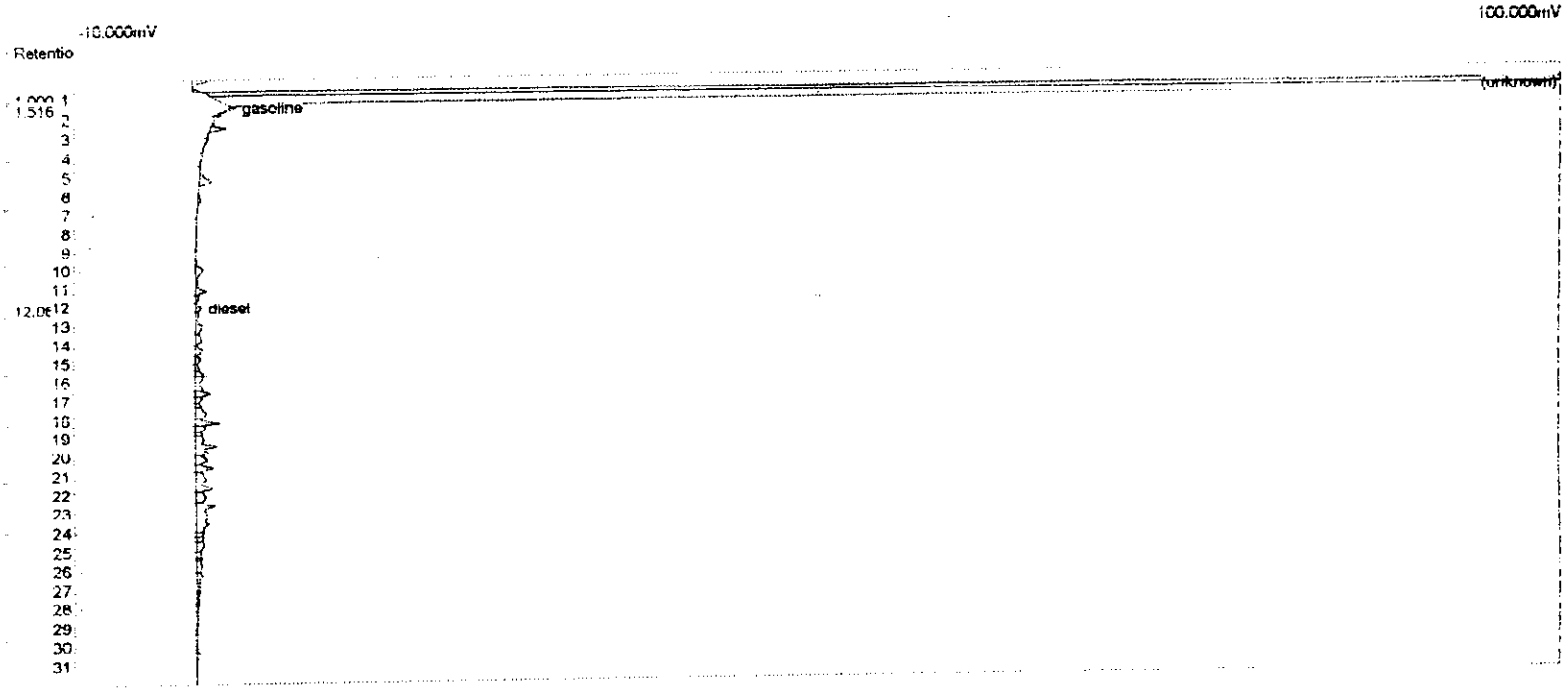
Component	Retention	Area	External	Units
ɔline	1.083	1376.715	950.77	
diesel	13.350	2603.535	880.76	ppm
		3980.250	1831.53	

Analysis Date: 05/14/2002 10:15:03
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fd1.CHR ()
Sample: 2000/2000 ppm G/Dopen
Operator: MAP



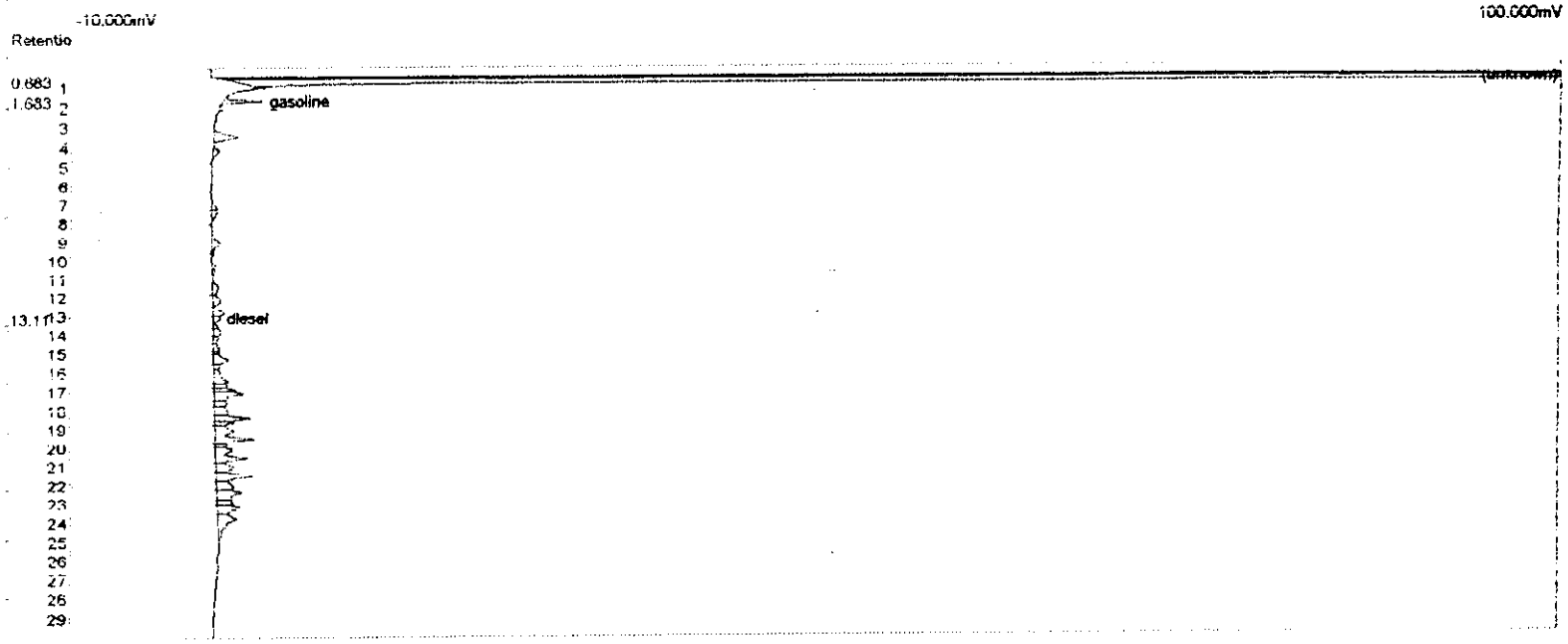
Component	Retention	Area	External	Units
gasoline	2.083	2251.736	1839.65	
diesel	17.383	5261.224	2170.47	ppm
		7512.960	4010.13	

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 17:28:20
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fb12.CHR ()
Sample: 100/200 ppm G/D close
Operator: MAP



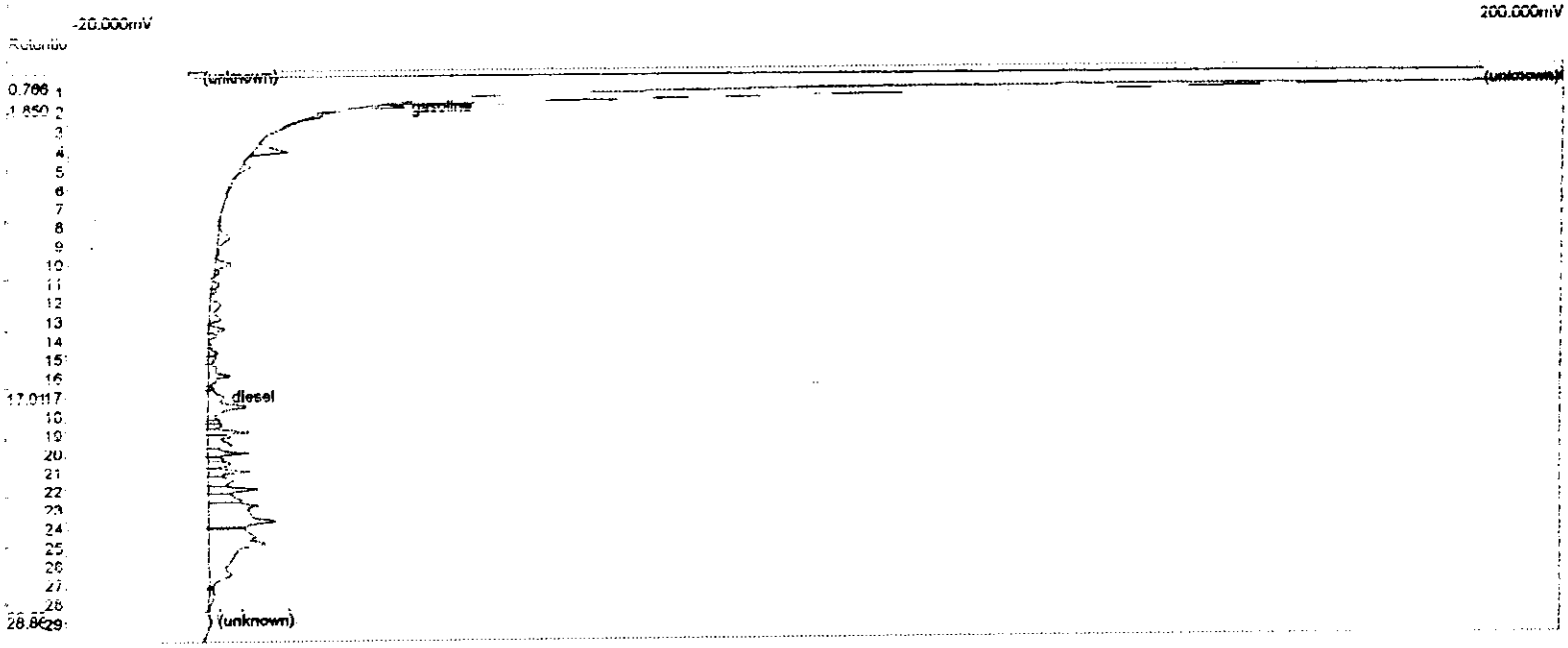
Component	Retention	Area	External	Units
gasoline	1.516	96.046	93.79	
diesel	12.083	482.013	173.64	ppm
		578.059	267.43	

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 17:28:20
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fc12.chr ()
Sample: 100/200 ppm G/D close
Operator: MAP



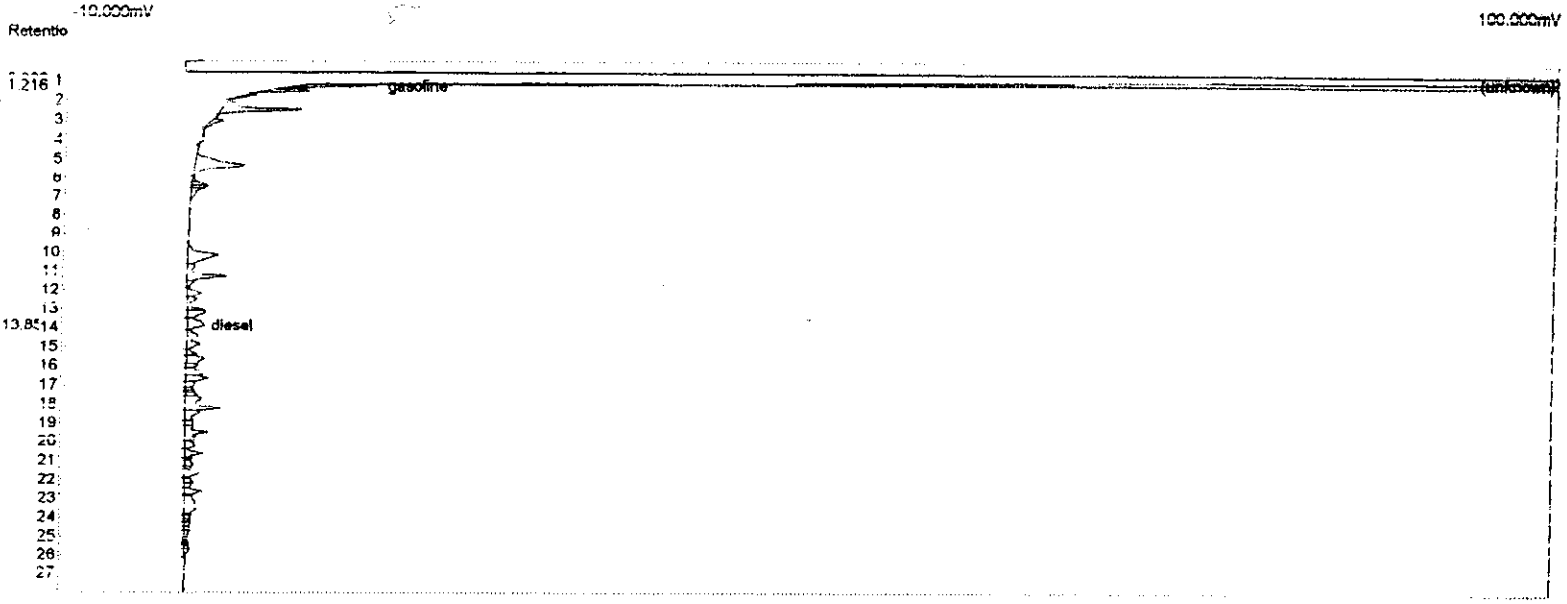
Component	Retention	Area	External	Units
gasoline	1.683	149.443	103.21	
diesel	13.116	642.523	217.36	ppm
		791.965	320.57	

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 17:28:20
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fd12.CHR ()
Sample: 500/1000 ppm G/D close
Operator: MAP



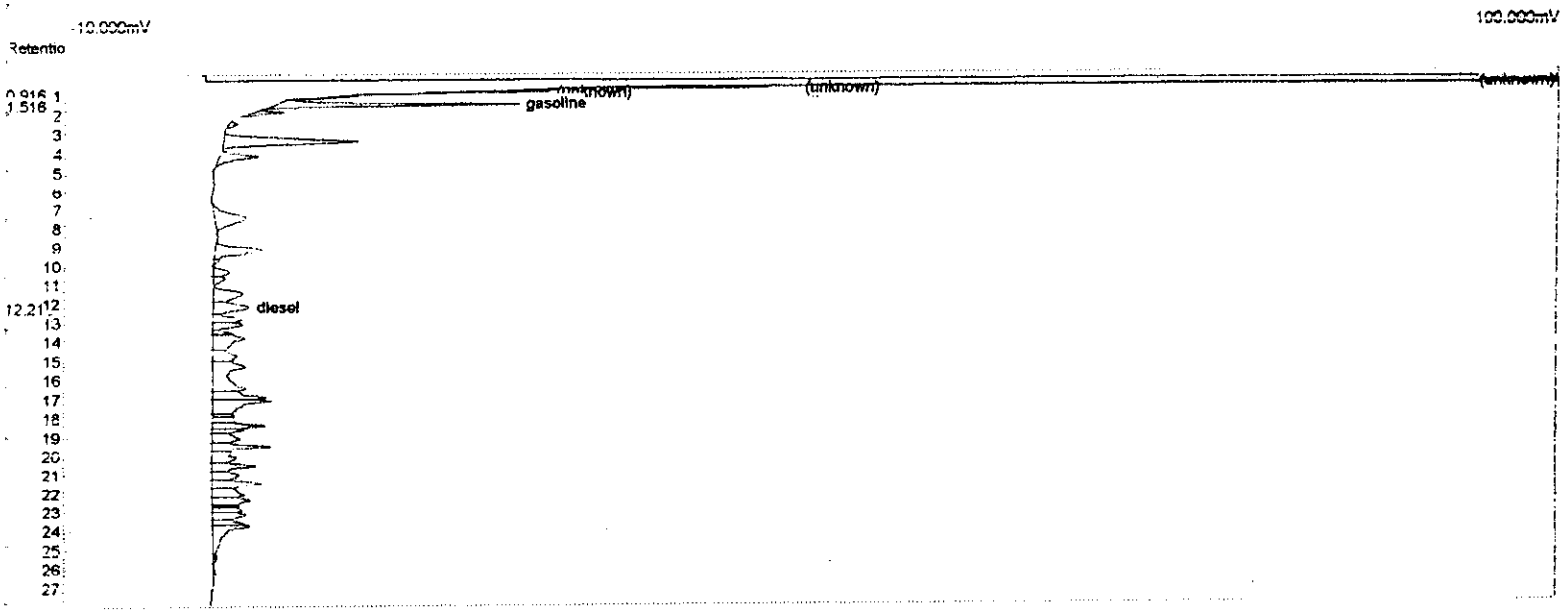
Component	Retention	Area	External	Units
gasoline	1.850	649.192	530.39	
diesel	17.016	2384.997	983.91	ppm
		3034.189	1514.30	

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 16:47:41
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fb11.CHR ()
Sample: MC-04 matrix spike
Operator: MAP



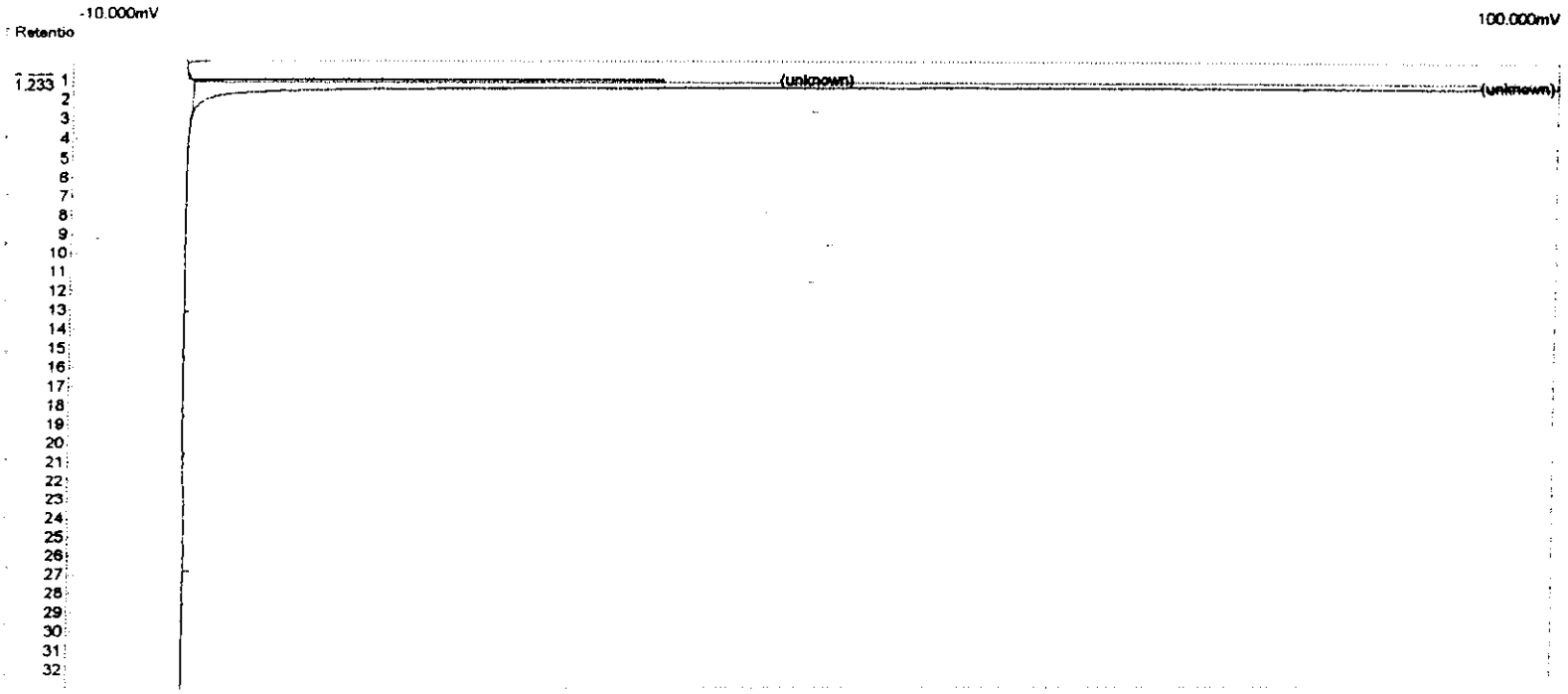
Component	Retention	Area	External	Units
line	1.216	497.883	486.21	
diesel	13.850	1269.176	457.20	ppm
		1767.059	943.41	

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 16:47:41
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fc11.chr ()
Sample: MC-04 matrix spike duplica
Operator: MAP



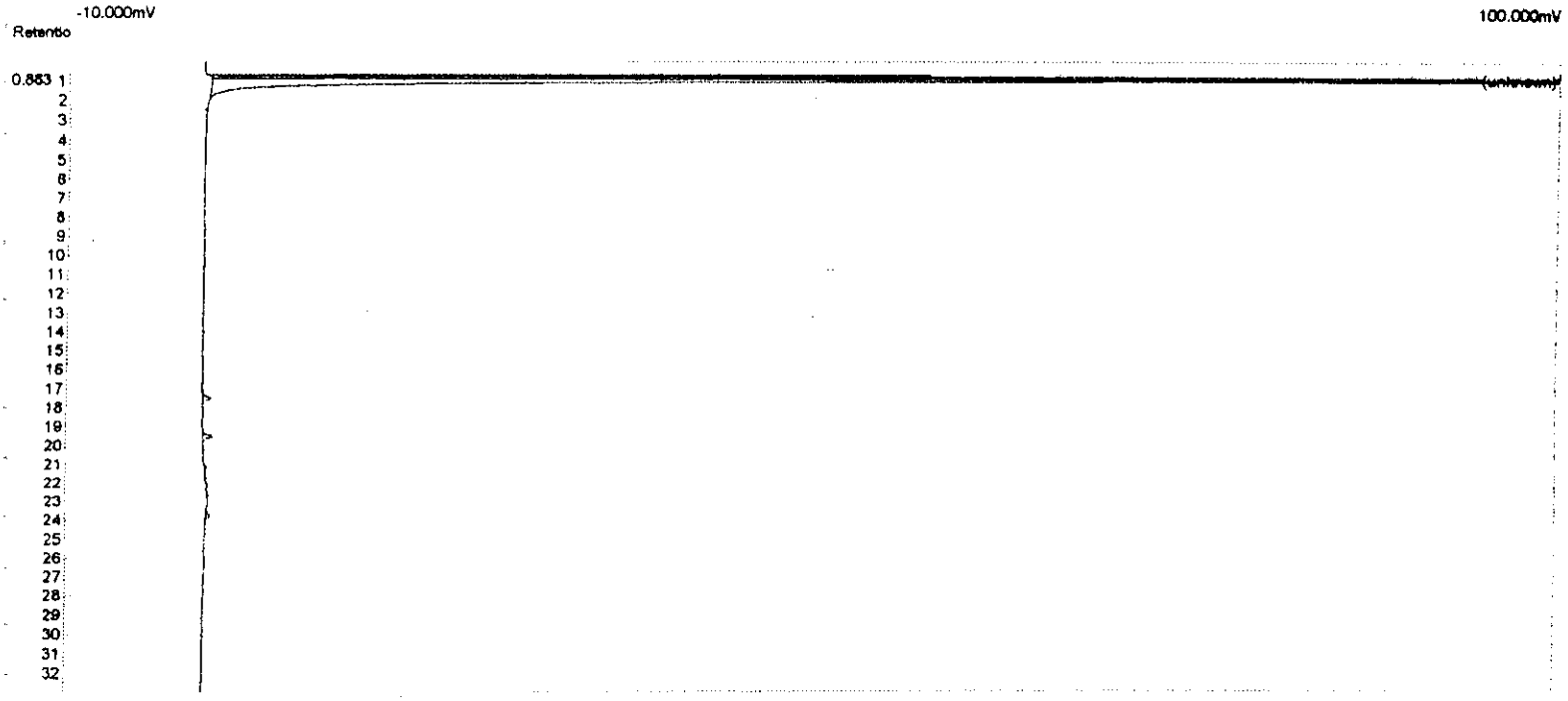
Component	Retention	Area	External	Units
>line	1.516	693.624	479.02	
diesel	12.216	1287.985	435.72	ppm
		1981.609	914.74	

Lab name: [illegible]
Analysis date: 05/14/2002 11:11:25
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fb2.CHR ()
Sample: METHOD BLANK
Operator: MAP



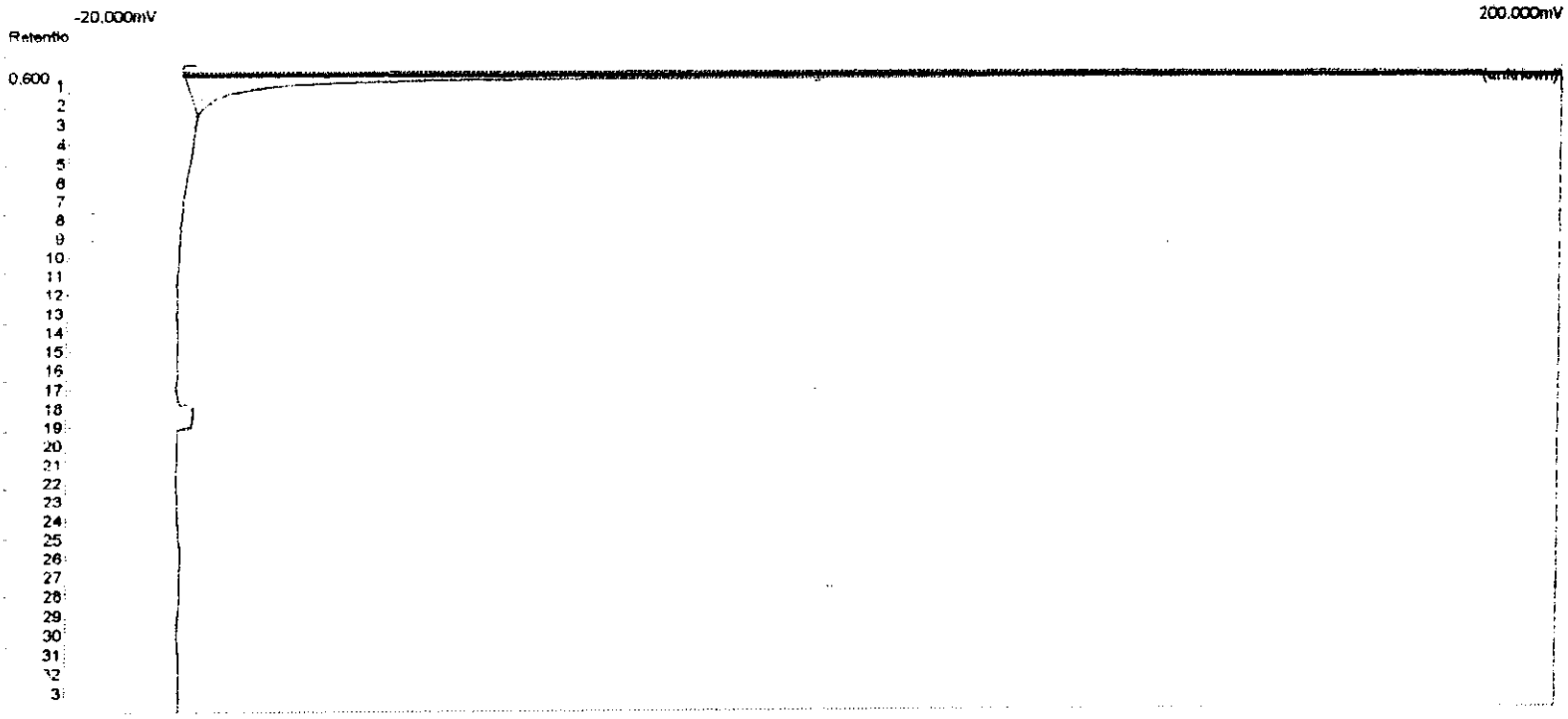
omponent	Retention	Area	External	Units
		0.000	0.00	

Analysis date: 05/14/2002 11:11:25
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fc2.CHR ()
Sample: METHOD BLANK
Operator: MAP



Component	Retention	Area	External	Units
		0.000	0.00	

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 13:13:38
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fd5.CHR ()
Sample: METHOD BLANK
Operator: MAP



Component	Retention	Area	External	Units
		0.000	0.00	

LABORATORY QA/QC

GEOENVIROTECH, INC.

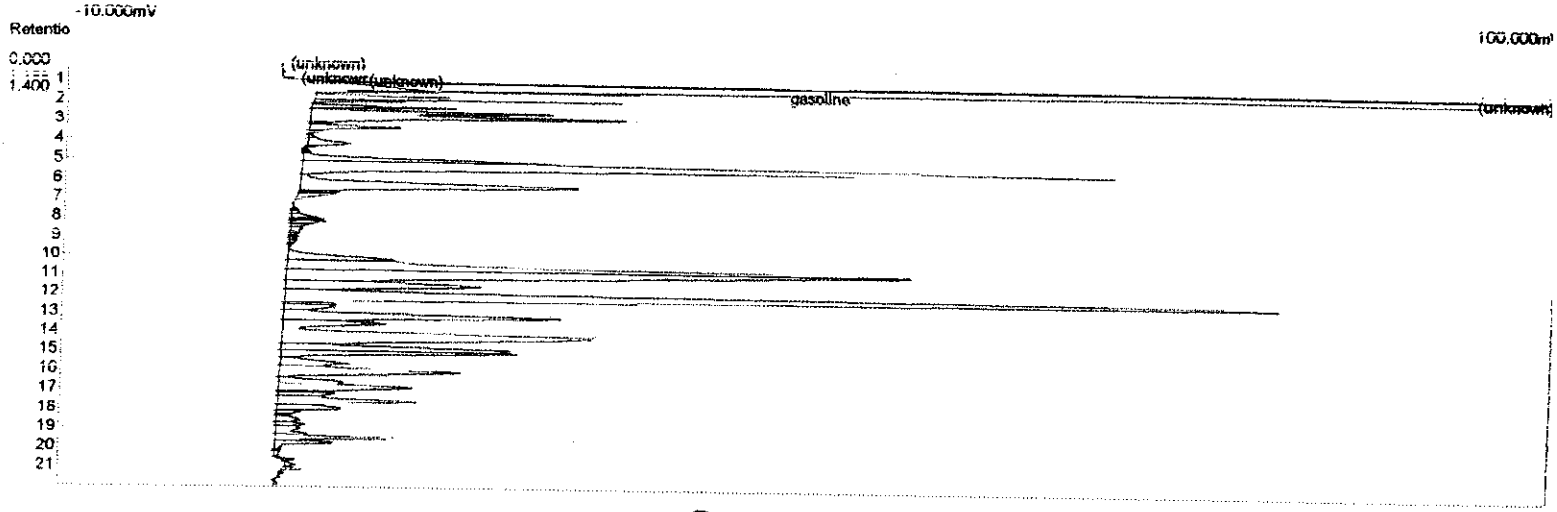
OSL Project #02I0509GET

TPH (Mod. EPA Method 8015B) ANALYSES OF SOIL

SAMPLE NUMBER	DATE ANALYZED	TPH-GRO C_5 - C_{12} (mg/Kg)
B - 4 @ 10'-13'	05/13/02	ND
B - 4 @ 10'-13' REP.	05/14/02	ND
DETECTION LIMIT (mg/Kg)		10

mg/Kg = MILLIGRAMS PER KILOGRAM
CONCENTRATIONS BASED ON DRY WEIGHT
REP = LABORATORY REPLICATE
"ND" INDICATES ANALYTE NOT DETECTED AT OR ABOVE THE LISTED DETECTION LIMIT
ANALYSES PERFORMED BY: MARCO A. PEDRAZA
DATA REVIEWED BY: KEVIN SHELBURNE

Lab name: [illegible] Labs Inc
Analysis date: 05/13/2002 16:42:01
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fb9.CHR ()
Sample: B-1/0509GET
Operator: MAP

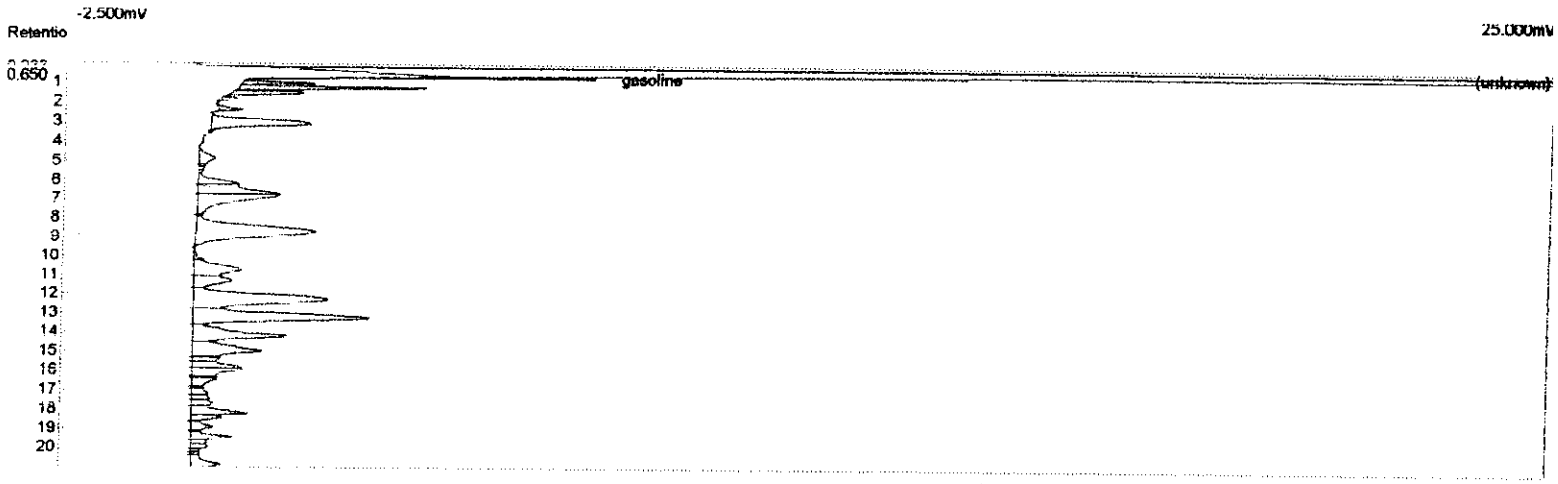


Component	Retention	Area	External	Units
gasoline	1.400	8435.772	8238.06	
		8435.772	8238.06	

D.F. = 2 % Solids = 88.1

X 2 ÷ 0.881 = 18,702 ~ 19,000 ppm
KB

Lab name: On Site Labs Inc
Analysis date: 05/13/2002 16:42:01
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fc9.CHR ()
Sample: B-2(/0509GET
Operator: MAP



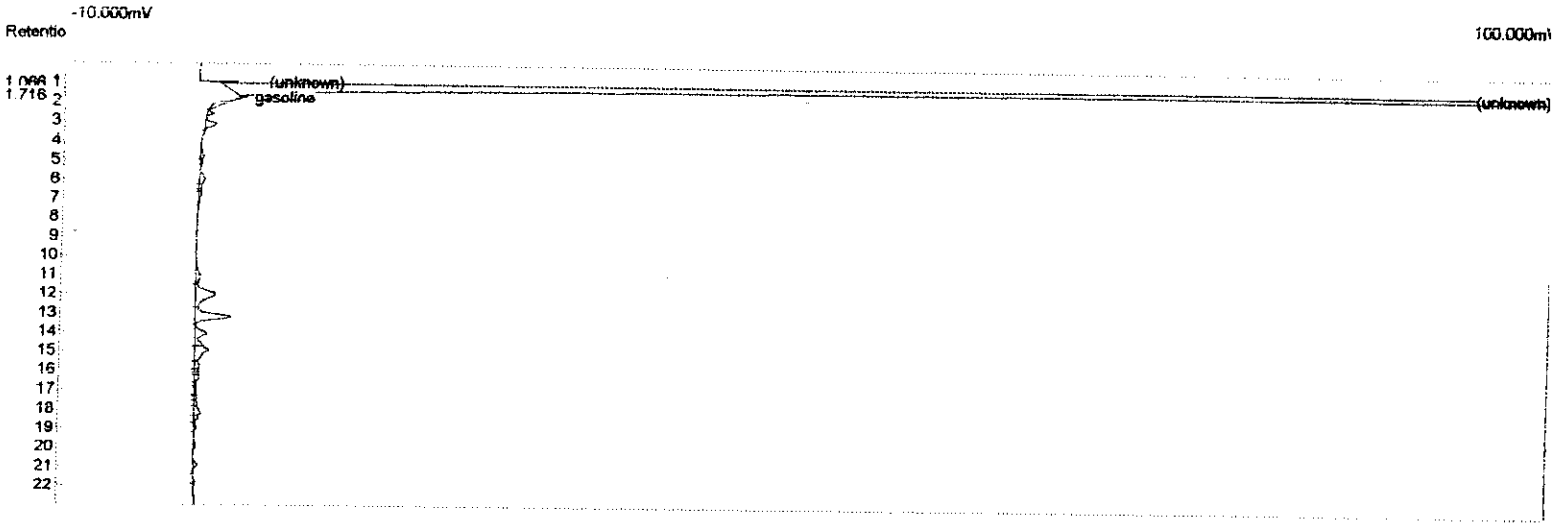
Component	Retention	Area	External	Units
gasoline	0.650	747.660	516.34	
		747.660	516.34	

D.F. = 2 % Solids = 93.7

X 2 ÷ 0.937 = 1,102 ~ 1,100 ppm

KL

Lab name: On Site Labs Inc
Analysis date: 05/13/2002 15:27:04
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fc6.CHR ()
Sample: B-3/0509GET
Operator: MAP



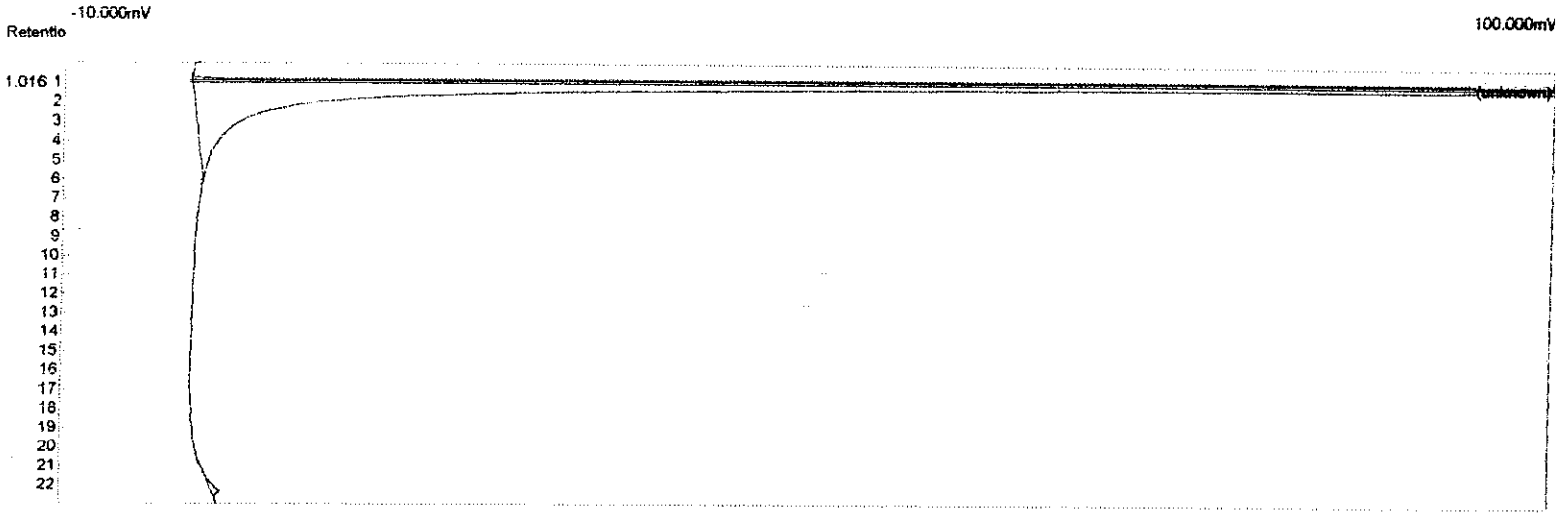
Component	Retention	Area	External	Units
gasoline	1.716	300.214	207.33	

D.F. = 2 % Solids = 88.7

300.214 207.33 × 2 ÷ 0.887 = 467 ~ 470 ppm

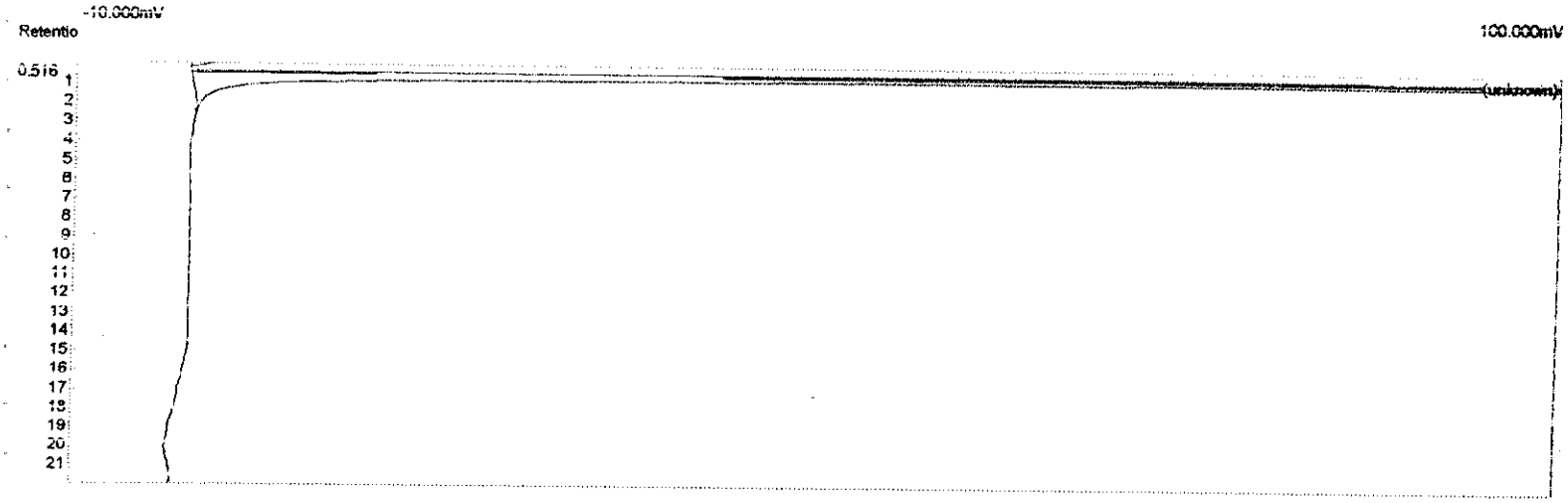
KL

Analysis date: 05/13/2002 15:27:04
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fd6.CHR ()
Sample: B-4/0509GET
Operator: MAP



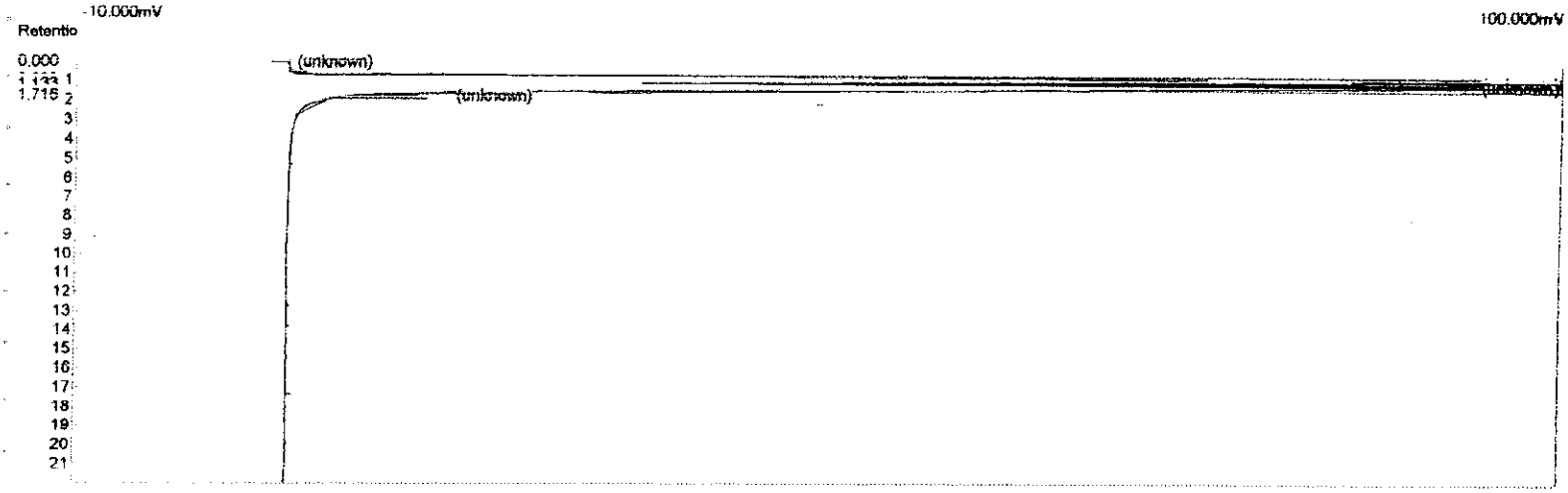
Component	Retention	Area	External	Units
		0.000	0.00	

Lab name: Spectra Labs Inc
Analysis date: 05/14/2002 16:21:21
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fd10.CHR ()
Sample: B-4/0509GET REP
Operator: MAP



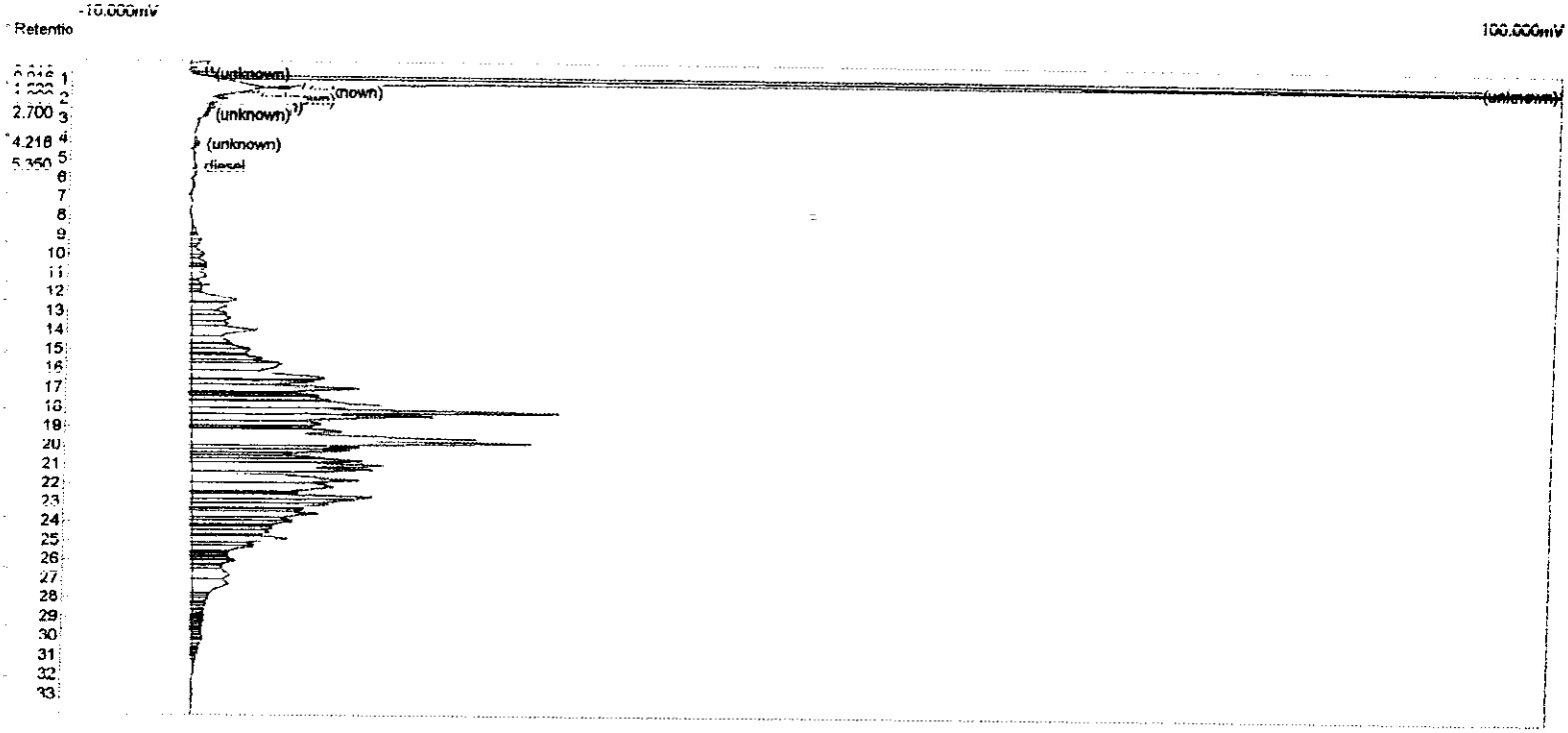
Component	Retention	Area	External	Units
		0.000	0.00	

Lab name: On Site Labs Inc
Analysis date: 05/13/2002 15:54:03
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fb7.CHR ()
Sample: B-5/0509GET
Operator: MAP



Component	Retention	Area	External	Units
		0.000	0.00	

Lab Name: On Site Labs Inc
Analysis date: 05/14/2002 13:50:44
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fb6.CHR ()
Sample: B-6/0509GET
Operator: MAP



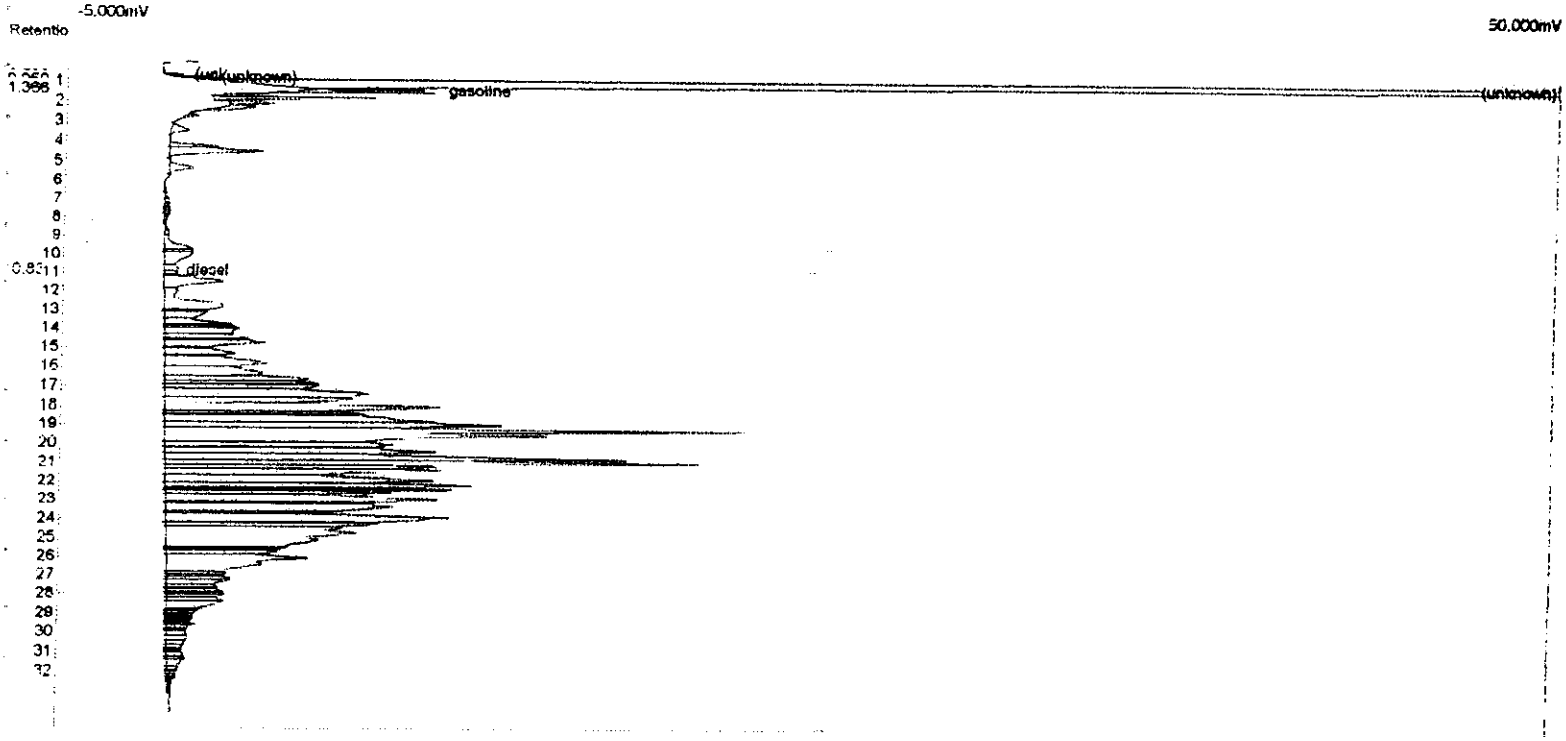
Component	Retention	Area	External	Units
diesel	5.350	6809.225	2452.89	ppm
		6809.225	2452.89	

D.F. = 2 % Solids = 86.4

$2452.89 \times 2 \div 0.864 = 5,678 \sim 5,700$ ppm

KS.

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 12:32:24
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fb4.CHR ()
Sample: B-7/0509GET
Operator: MAP



Component	Retention	Area	External	Units
gasoline	1.366			
diesel	10.833	5659.908	2038.87	ppm
		5919.640	2292.52	

D.F. = 2 % Solids = 85.1

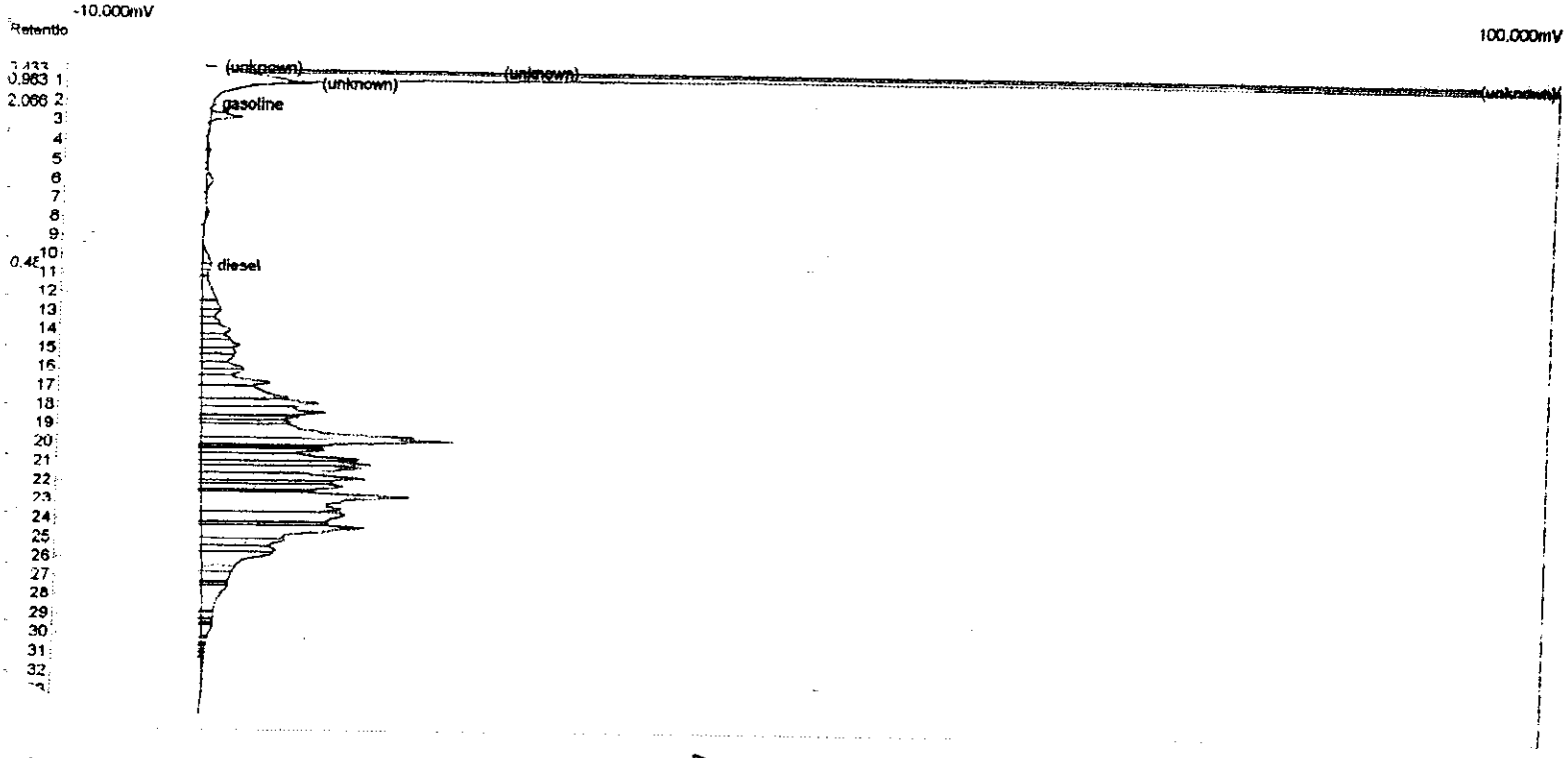
4991.70 ~ 4,800

X 2 ÷ 0.851 = ~~5,350~~ ~~5,400 ppm~~

5/20/02

KL

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 12:32:24
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fc4.chr ()
Sample: B-8/0509GET
Operator: MAP



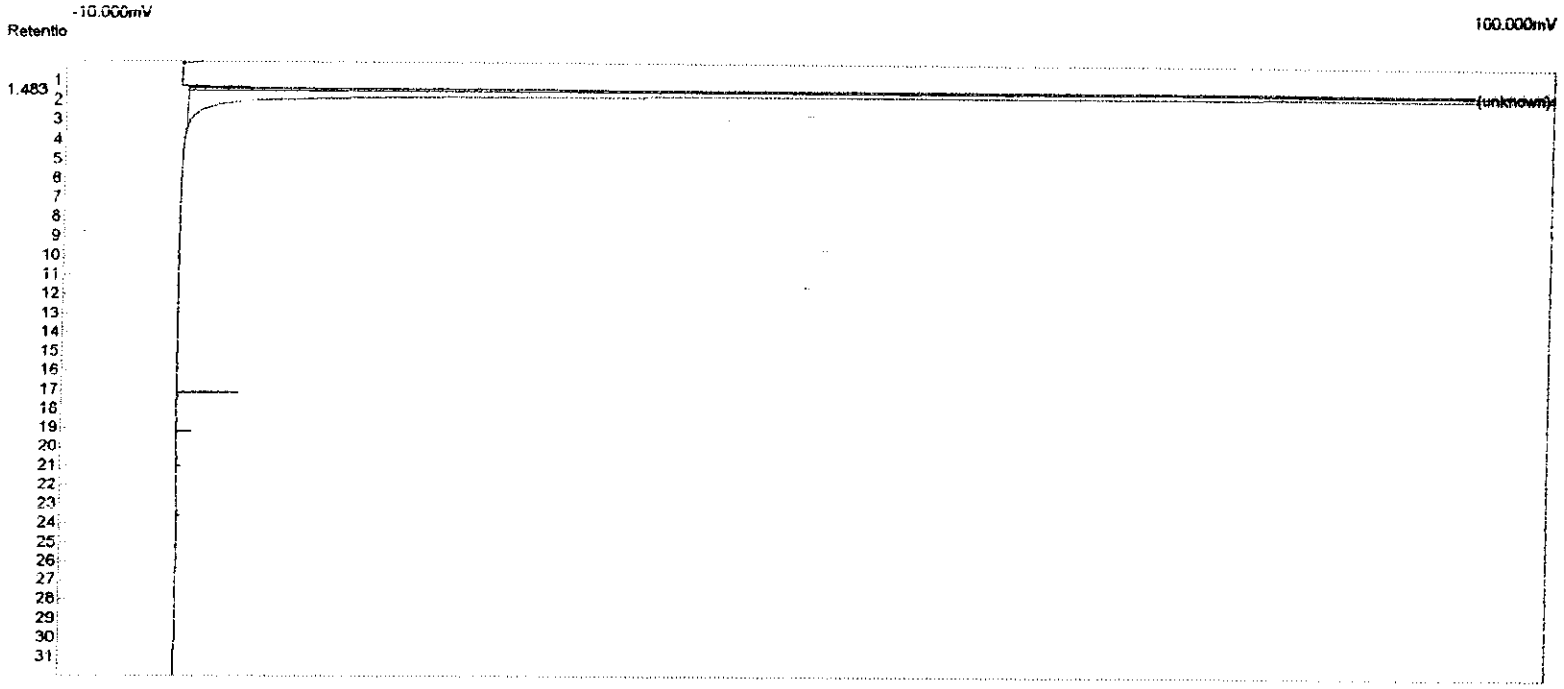
Component	Retention	Area	External	Units
isoline	2.066			
diesel	10.483	5639.270	1907.74	ppm
		5733.911	1973.10	

D.F. = 2 % Solids = 89.1

x 2 ÷ 0.891 = 4,282 ~ 4,300 ppm

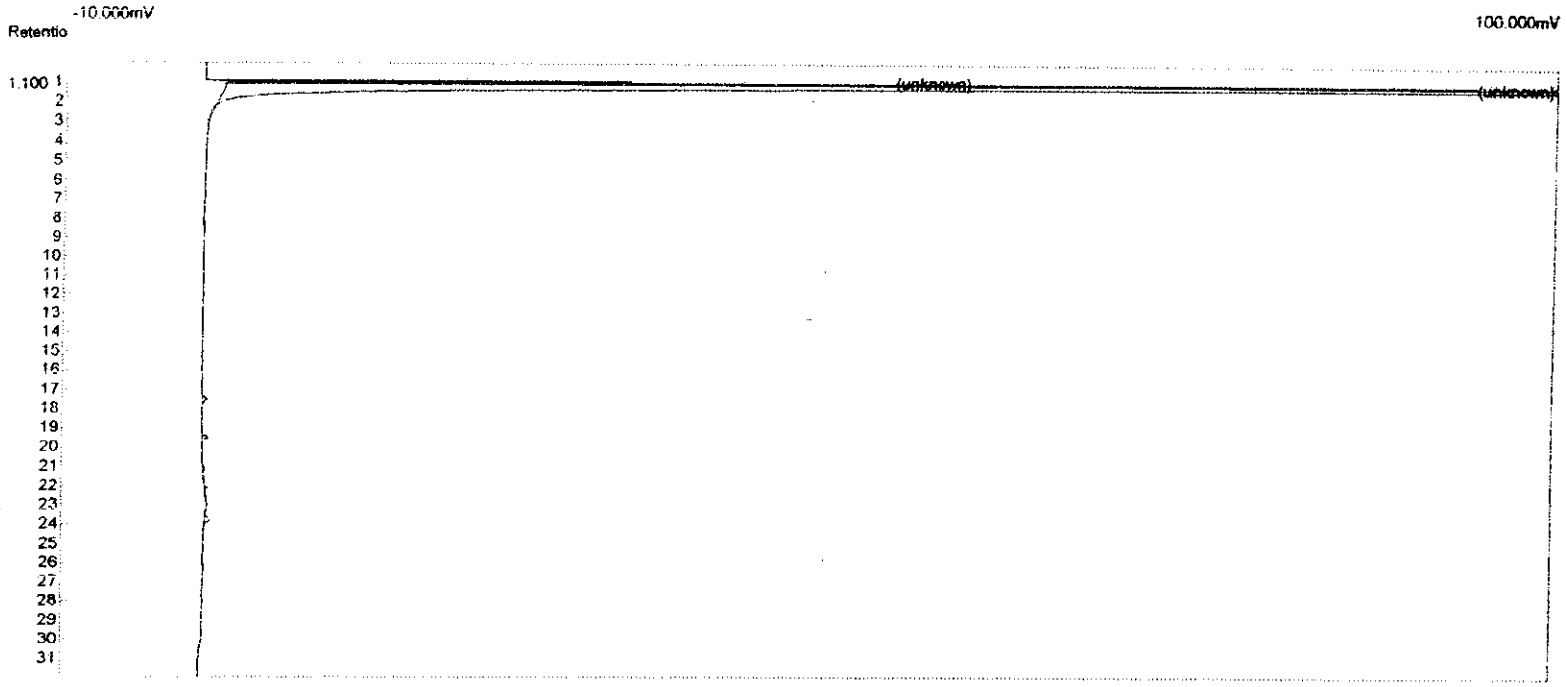
KL

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 11:56:02
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fb3.CHR ()
Sample: B-9/0509GET
Operator: MAP



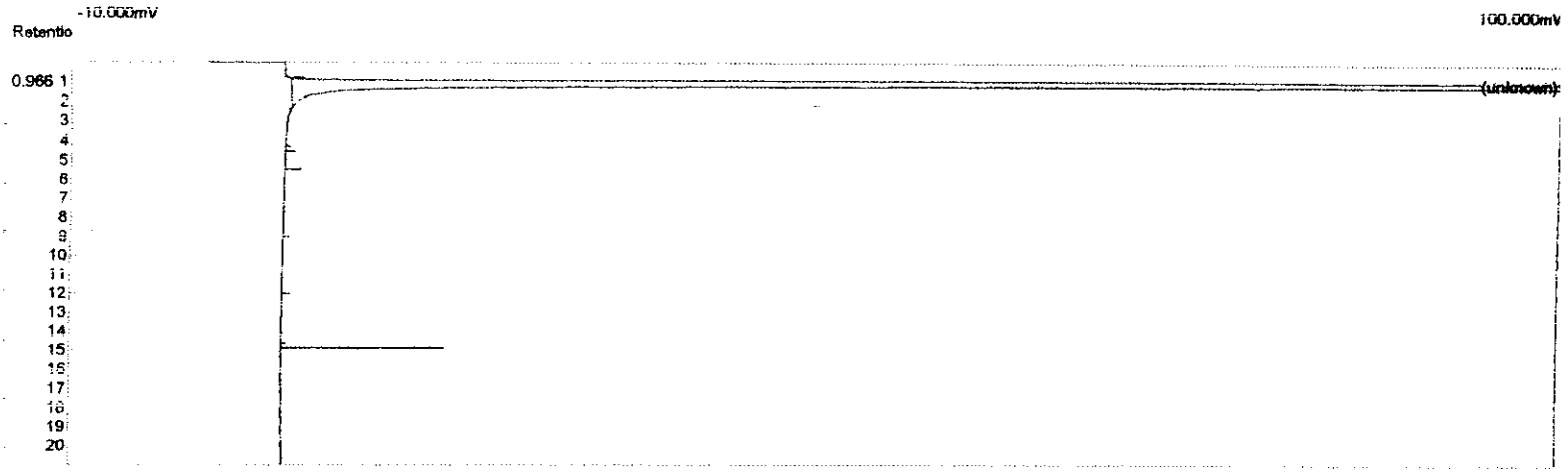
Component	Retention	Area	External	Units
		0.000	0.00	

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 11:56:02
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fc3.chr ()
Sample: B-10/0509GET
Operator: MAP



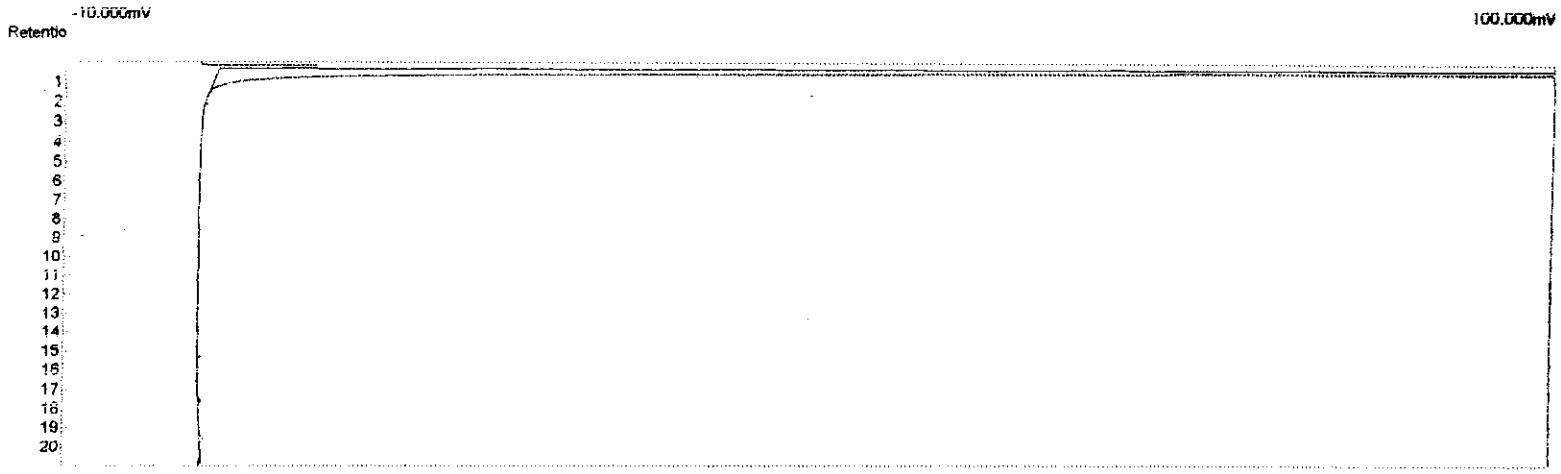
Component	Retention	Area	External	Units
		0.000	0.00	

Lab name: On Site Labs Inc
Analysis date: 05/13/2002 16:18:36
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fb8.CHR ()
Sample: B-11/0509GET
Operator: MAP



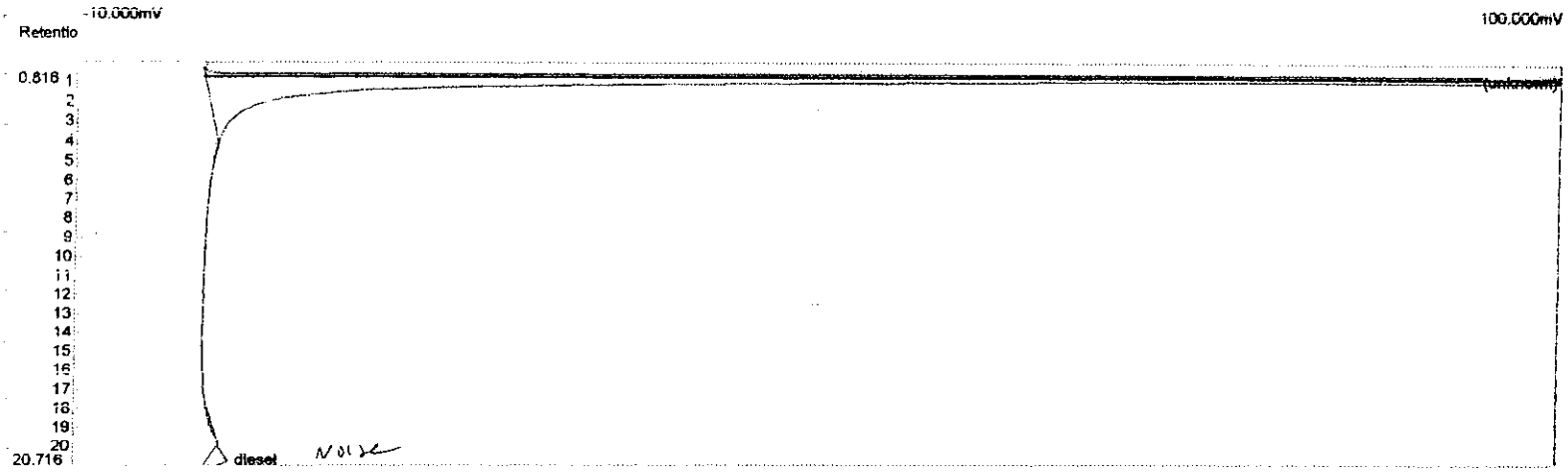
Component	Retention	Area	External	Units
		0.000	0.00	

Lab name: On Site Labs Inc
Analysis date: 05/13/2002 16:18:36
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fc8.CHR ()
Sample: B-12(0-5)/0509GET
Operator: MAP



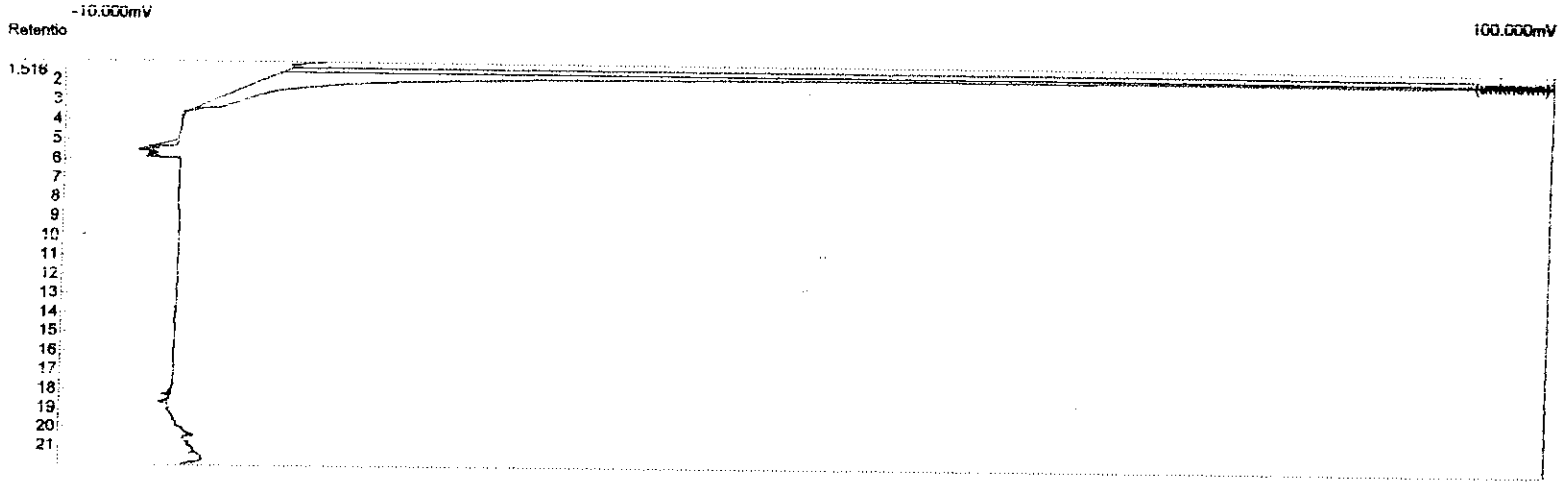
Component	Retention	Area	External	Units
		0.000	0.00	

Lab name: On Site Labs Inc
Analysis date: 05/13/2002 16:18:36
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fd8.CHR ()
Sample: B-12(10-15)/0509GET
Operator: MAP



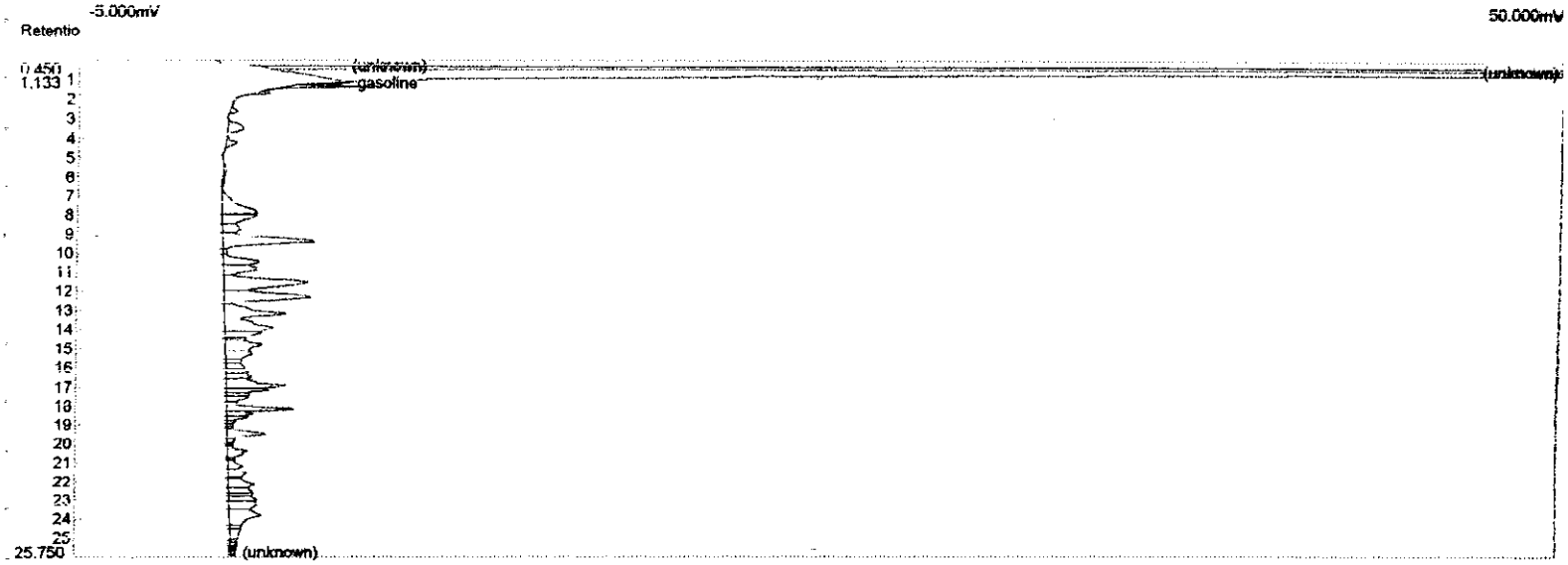
Component	Retention	Area	External	Units
diesel	~~20.716~~	~~68.490~~	~~28.25~~	~~ppm~~
		68.490	28.25	

Lab name: On Site Labs Inc
Analysis date: 05/13/2002 16:42:01
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fd9.CHR ()
Sample: B-13(5-10)/0509GET
Operator: MAP



Component	Retention	Area	External	Units
		0.000	0.00	

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 13:50:44
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fc6.chr ()
Sample: B-13(10-15)/0509GET
Operator: MAP



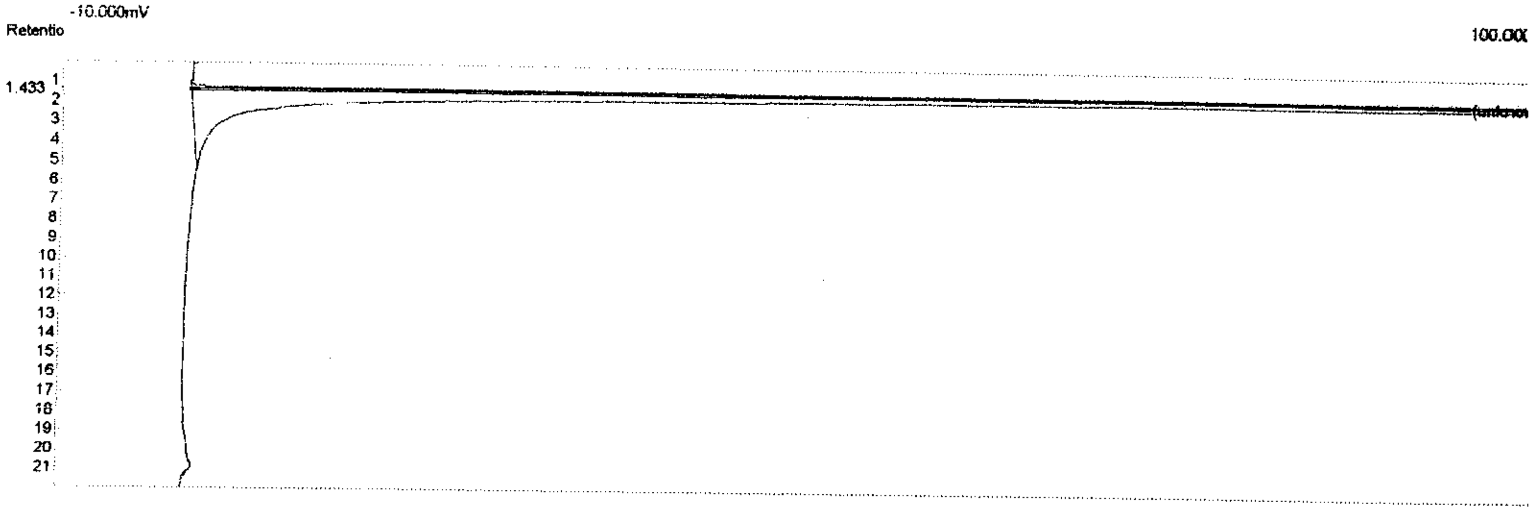
Component	Retention	Area	External	Units
gasoline	1.133	1032.446	713.02	
		1032.446	713.02	

D.F. = 2 % Solids = 93.5

X 2 ÷ 0.935 = 1,525 ~ 1,500 ppm

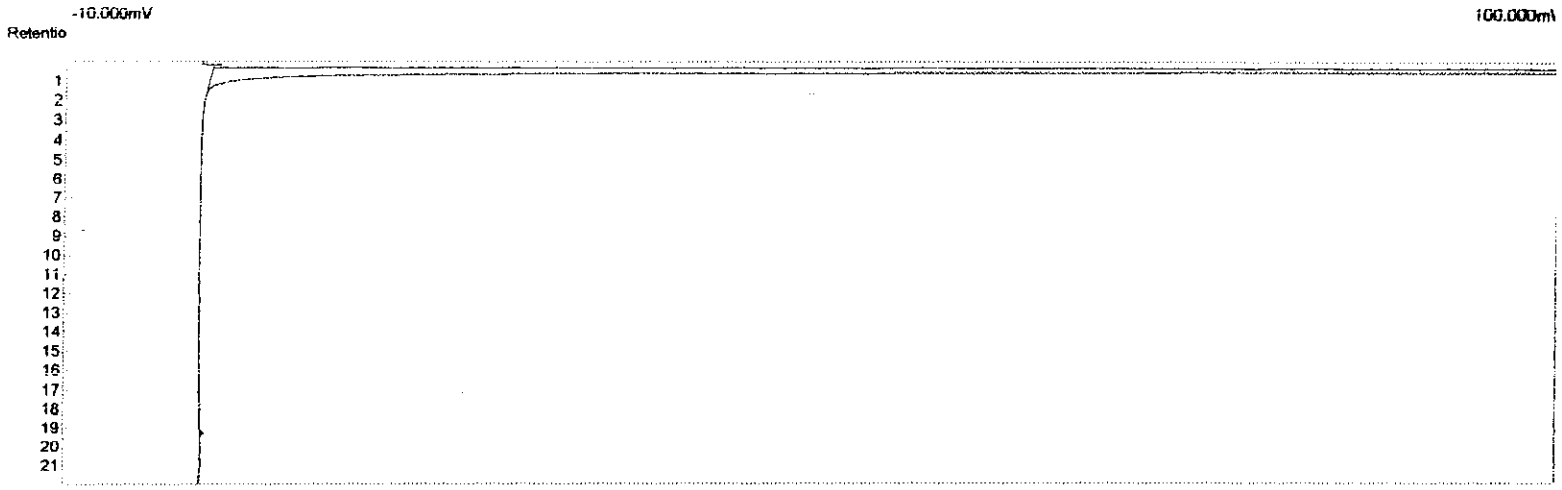
KL

Lab name: On Site Labs Inc
Analysis date: 05/13/2002 15:54:03
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fd7.CHR ()
Sample: B-100/0509GET
Operator: MAP



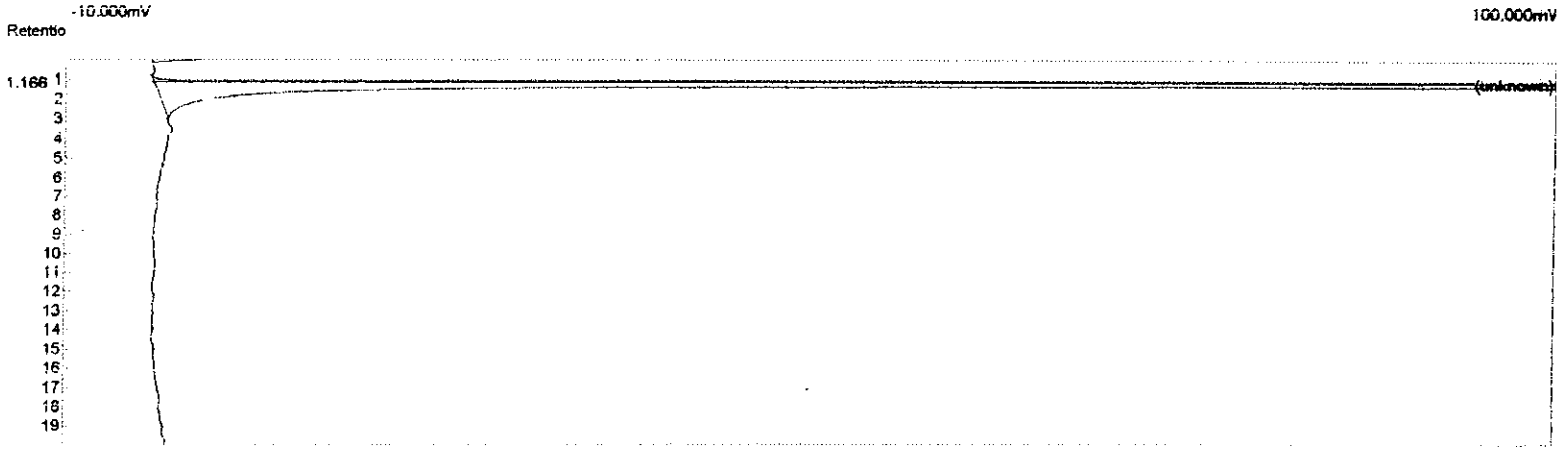
Component	Retention	Area	External	Units
		0.000	0.00	

Lab name: On Site Labs Inc
Analysis date: 05/13/2002 15:54:03
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0513fc7.CHR ()
Sample: TB/0509GET
Operator: MAP



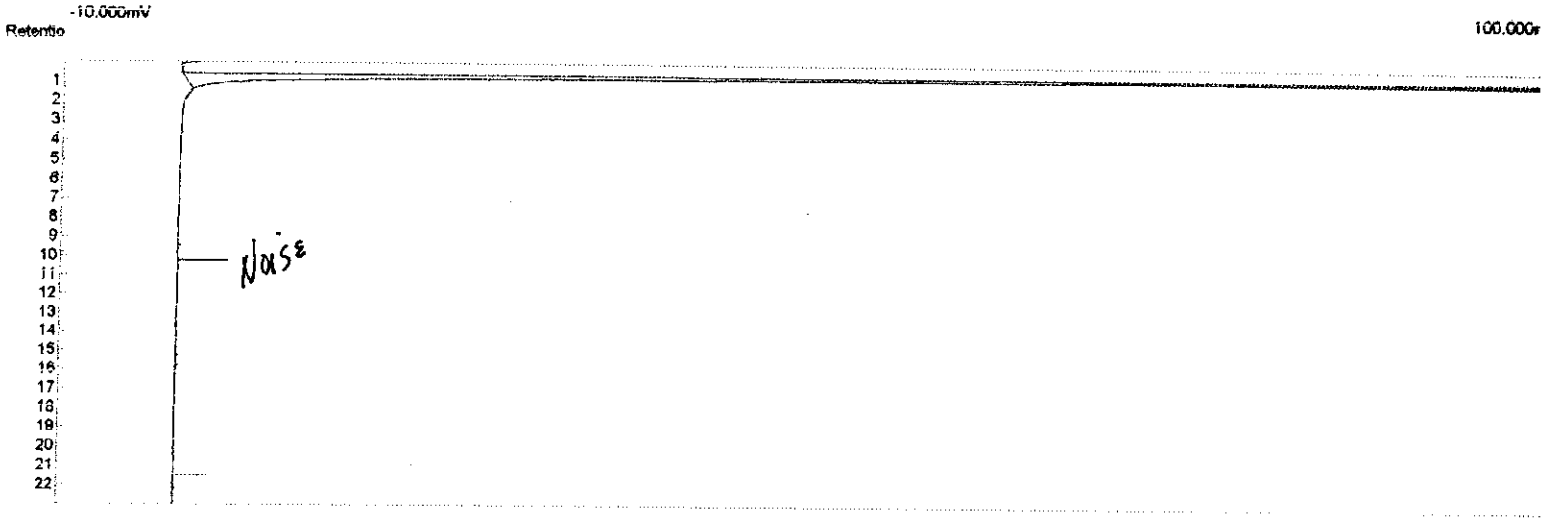
Component	Retention	Area	External	Units
		0.000	0.00	

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 13:50:44
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fd6.CHR ()
Sample: FB-1/0509GET
Operator: MAP



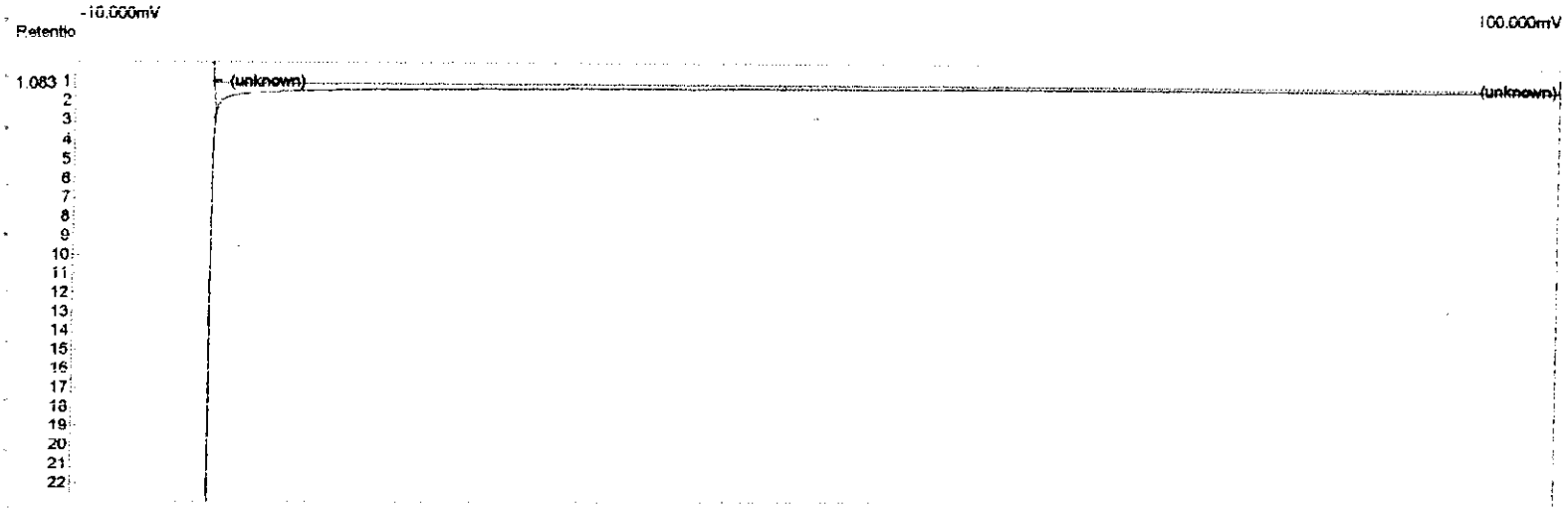
Component	Retention	Area	External	Units
		0.000	0.00	

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 14:33:12
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fb7.CHR ()
Sample: FB-2/0509GET
Operator: MAP



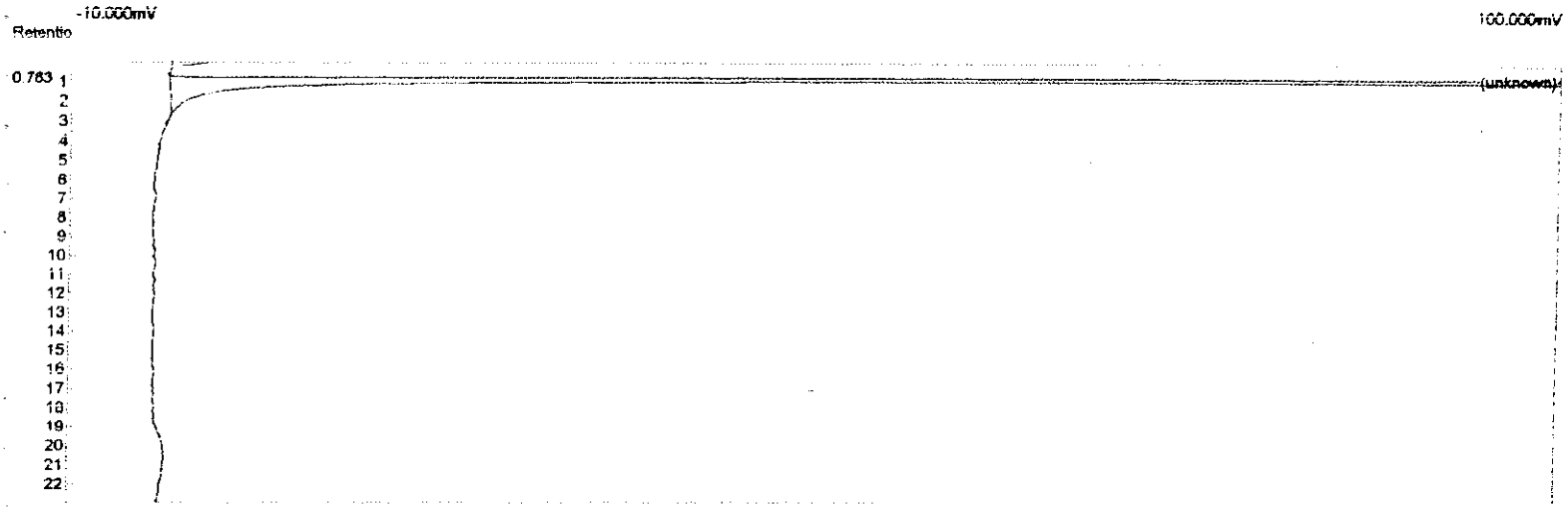
Component	Retention	Area	External	Units
		0.000	0.00	

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 14:33:12
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fc7.chr ()
Sample: FB-3/0509GET
Operator: MAP



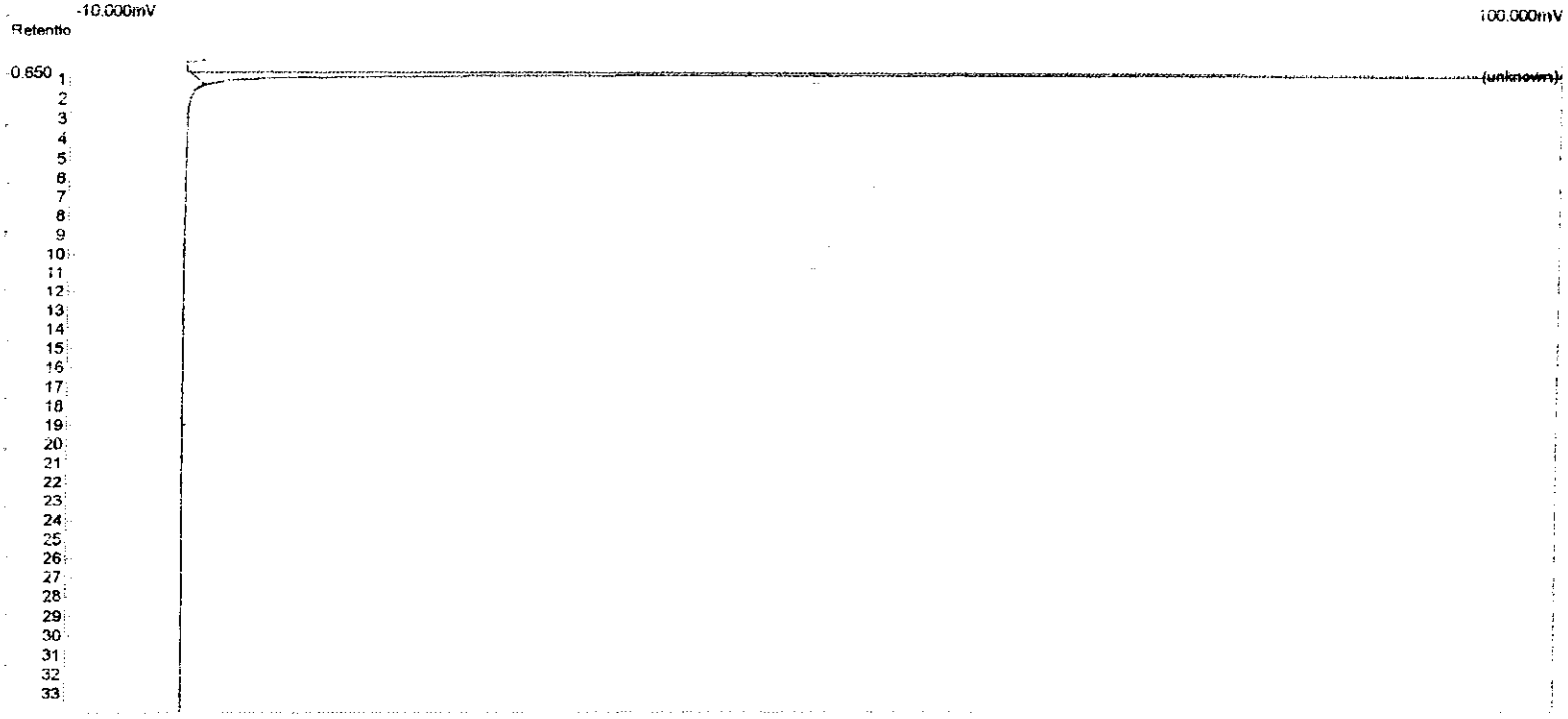
Component	Retention	Area	External	Units
		0.000	0.00	

Lab Name: On Site Labs Inc
Analysis date: 05/14/2002 14:33:12
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fd7.CHR ()
Sample: EB-1/0509GET
Operator: MAP



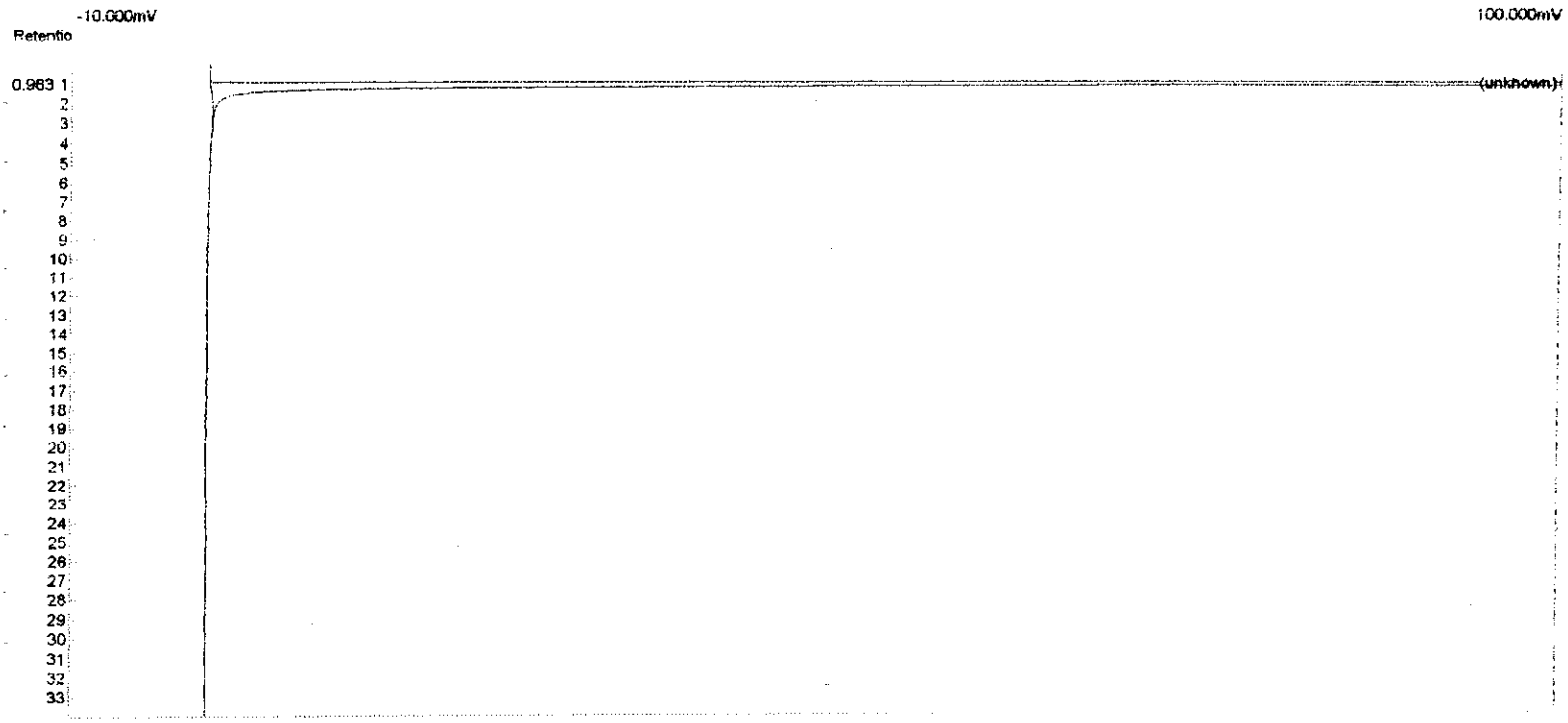
Component	Retention	Area	External	Units
		0.000	0.00	

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 13:13:36
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fb5.CHR ()
Sample: EB-2/0509GET
Operator: MAP



Component	Retention	Area	External	Units
		0.000	0.00	

Lab name: On Site Labs Inc
Analysis date: 05/14/2002 13:13:36
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 3 - Ch. 3
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0514fc5.chr ()
Sample: EB-3/0509GET
Operator: MAP



Component	Retention	Area	External	Units
		0.000	0.00	

On Site Labs, Inc.

Chain of Custody Record

PO # _____

Client: GeoEnviroTech, Inc.

Address #7 Acuarela St., Guaynabo, Puerto Rico

Phone (787) 720-5869 FAX (787) 720-2318

Client Project # GET-02-053 Project Manager Juan D. Negrón

Date May 9, 2002 Page 1 of 3

LAB Project # 02I0509GET Control# 2091

Location Former UST area, Peñuelas, COROO, PR

Collector Juan D Negrón JDN Date of Collection May 7, 2002

Sample Name	(feet) Depth	Time	Sample Matrix	Container Type	"Grab" or Composite"	8021	8020 A (BTEX)	VOL 8260	SEMI VOL 8270	TRPH 418.1	TPH 8015 B (gasoline)	TPH 8015 B (diesel)	TPH 8015 B (gas & diesel)	TPH 8015 B (motor oil)	TPH 8015 B (full range)	TOTAL LEAD	TCLP LEAD	METALS	RCI	8082-PCBS	8082-Pesticide	PNA 610/8100	TCLP METALS			FIELD NOTES / PRESERVATION	Total # of Containers
TB	—	0800	W	40 ml	G						✓																2
EB-1	—	1125	W	40 ml	G						✓																2
FB-1	—	1600	W	40 ml	G						✓																2
B-1	10-15	1200	S	2 oz	G						✓																1
B-2	10-15	1400	S	2 oz	G						✓																1
B-3	10-13	1550	S	2 oz	G						✓																1

RELINQUISHED BY (signature)	Date/Time	RECEIVED BY (signature)	Date/Time
Juan D Negrón	5/9/02 1630	Janice K Shelburne	5/9/02 16:30
RELINQUISHED BY (signature)	Date/Time	RECEIVED BY (signature)	Date/Time

Total # of containers: 9

Chain of Custody seals Y / N / NA: /

Seals Intact? Y / N / NA: /

Received good conditions / cold: Yes

TEMPERATURE: 4° C Iced

G=Grab C=Composite S=Soil W=Aqueous

On Site Labs, Inc.

Chain of Custody Record

PO # _____

Client: Geo EnviroTech. Inc.
Address #7 Acuarela St., Guaynabo, Puerto Rico
Phone (787) 720-5869 FAX (787) 720-2318
Client Project # GET-02-053 Project Manager Juan D. Negrón

Date May 9, 2002 Page 2 of 3
LAB Project # 02E0509GET Control# 2091
Location Former UST area, CORCO, Peñuelas, PR
Collector Juan D. Negrón - JDN Date of Collection May 8, 2002

Sample Name	(feet) Depth	Time	Sample Matrix	Container Type	"Grab & Composite"	8021	8020 A (BTEX)	VOL 8260	SEMI VOL 8270	TRPH 418.1	TPH 8015 B (gasoline)	TPH 8015 B (diesel)	TPH 8015 B (gas & diesel)	TPH 8015 B (motor oil)	TPH 8015 B (full range)	TOTAL LEAD	TCLP LEAD	METALS	RCI	8082-PCBS	8082-Pesticide	PNA 610/8100	TCLP METALS			FIELD NOTES / PRESERVATION	Total # of Containers
EB-2	—	0845	W	40 ml	G								✓														2
FB-2	—	1200	W	40 ml	G						✓																2
B-4	10-13	1010	S	2 oz	G						✓																1
B-5	10-12	1115	S	2 oz	G						✓																1
B-6	10-15	1430	S	2 oz	G							✓															1
B-7	10-15	1540	S	2 oz	G							✓															1
B-8	10-15	1610	S	2 oz	G							✓															1
B-100		1045	S	2 oz	G						✓																

RELINQUISHED BY (signature)	Date/Time	RECEIVED BY (signature)	Date/Time
Juan D Negrón	5/9/02 1630	Jamie K Shuttuck	5/9/02 16:30
RELINQUISHED BY (signature)	Date/Time	RECEIVED BY (signature)	Date/Time

Total # of containers	9
Chain of Custody seals Y / N / NA	Y
Seals Intact? Y / N / NA	
Received good conditions / cold	Yes

TEMPERATURE
4°C
Iced

G=Grab C=Composite S=Soil W=Aqueous

On Site Labs, Inc.

Chain of Custody Record

PO # _____

Client: GeoEnviroTech, Inc. | Date May 9, 2002 | Page 3 of 3

Address #7 Acuarela St., Guaynabo, Puerto Rico | LAB Project # 02I0509GET | Control# 2091

Phone (787) 720-5869 | FAX (787) 720-2318 | Location Former UST area, SOACO, Peñuelas, PR

Client Project # GET-02-053 | Project Manager Juan D. Negrón | Collector Juan D. Negrón | Date of Collection May 9, 2002

Sample Name	(feet) Depth	Time	Sample Matrix	Container Type	"Grab Composite"	8021	8020 A (BTEX)	VOL 8260	SEMI VOL 8270	TRPH 418.1	TPH 8015 B (gasoline)	TPH 8015 B (diesel)	TPH 8015 B (gas & diesel)	TPH 8015 B (motor oil)	TPH 8015 B (full range)	TOTAL LEAD	TCLP LEAD	METALS	RCI	8082-PCBS	8082-Pesticide	PNA 610/8100	TCLP METALS			FIELD NOTES / PRESERVATION	Total # of Containers
EB-3	—	0830	W	40 ml	G								✓														2
FB-3	—	1430	W	40 ml	G						✓																2
B-9	10-15	0915	S	2 oz	G							✓															1
B-10	10-14	1000	S	2 oz	G							✓															1
B-11	10-15	1250	S	2 oz	G						✓																
B-12	0-5	1310	S	2 oz	G						✓																
B-12	10-15	1335	S	2 oz	G						✓																
B-13	5-10	1410	S	2 oz	G						✓																
B-13	10-15	1425	S	2 oz	G						✓																

RELINQUISHED BY (signature) Juan D Negrón | Date/Time 5/9/02 1630 | RECEIVED BY (signature) Jamie K Shelburne | Date/Time 5/9/02 16:30

RELINQUISHED BY (signature) | Date/Time | RECEIVED BY (signature) | Date/Time

Total # of containers: 6

Chain of Custody seals Y / N / NA

Seals Intact? Y / N / NA

Received good conditions / cold: Yes

TEMPERATURE: 4° Cool

G=Grab C=Composite S=Soil W=Aqueous

On Site Labs, Inc.

PMB 627, HC-01 Box 29030, Caguas, PR 00725
Telephone 787-720-0329 Fax 787-789-3858

October 1, 2002
OSL Project #02I0720GET

Mr. Juan Negron
GeoEnviroTech
PMB 347
405 Ave. Esmeralda, Suite 2
Guaynabo, P.R. 00969-4457

SUBJECT: DATA REPORT – PROJECT NO. GET-02-053
CORCO FACILITY, PENUELAS, PR

Dear Mr. Negron:

Please find enclosed the data report for samples collected by GET staff from the above referenced project site and delivered to On Site Lab's facility under the proper chain-of-custody protocol. A Puerto Rico-certified chemist performed the following analyses:

- 6 soil samples analyzed for TPH-GRO by modified EPA test method 8015B.
- 1 trip, 3 field and 3 equipment blank water samples analyzed for TPH-GRO.
- Laboratory QA/QC analyses for TPH-GRO.

The results of the analyses are summarized in the attached tables. Applicable detection limits, QA/QC data, chromatograms, and a chain-of-custody are also included as attachments.

On Site Labs appreciates the opportunity to provide analytical services for this project. If you have any questions relating to the data or report, please do not hesitate to contact us.

Sincerely,
On Site Labs, Inc.

Kevin Shelburne
Principal

Attachments

On Site Labs, Inc.

PMB 627, HC-01 Box 29030, Caguas, PR 00725
Telephone 787-720-0329 Fax 787-789-3858

GEOENVIROTECH, INC. PROJECT NO. GET-02-053
CORCO
PEÑUELAS, PR

On Site Project #02I0920GET

TPH (Mod. EPA Method 8015B) ANALYSES OF SOIL

SAMPLE NUMBER	DATE ANALYZED	TPH-GAS C_5 - C_{12} (mg/Kg)
METHOD BLANK	09/27/02	ND
B - 201	09/27/02	**1,800**
B - 202	09/27/02	60
B - 203	09/27/02	ND
B - 204	09/27/02	ND
B - 205	09/27/02	**2,100**
B - 210	09/27/02	ND
DETECTION LIMIT (mg/Kg)		10

TPH (Mod. EPA Method 8015B) ANALYSES OF WATER

SAMPLE NUMBER	DATE ANALYZED	TPH-GAS C_5 - C_{12} (mg/L)
METHOD BLANK	09/27/02	ND
TB - 091802	09/27/02	ND
EB - 091802	09/27/02	ND
FB - 091802	09/27/02	ND
EB - 091902	09/27/02	ND
FB - 091902	09/27/02	ND
EB - 092002	09/27/02	ND
FB - 092002	09/27/02	ND
DETECTION LIMIT (mg/L)		10

mg/Kg = MILLIGRAMS PER KILOGRAM
CONCENTRATIONS BASED ON DRY WEIGHT
mg/L = MILLIGRAMS PER LITER
"ND" INDICATES ANALYTE NOT DETECTED AT OR ABOVE THE LISTED DETECTION LIMIT

SAMPLING PERFORMED BY: GET PERSONNEL
ANALYSES PERFORMED BY: MARCO A. PEDRAZA
DATA REVIEWED BY: KEVIN SHELBURNE

Marco A. Pedraza
Laboratory Manager

MARCO A. PEDRAZA RUIZ
QUIMICO LICENCIADO
LIGENCIA NOM. 3393
ESTADO LIBRE ASOCIADO DE PUERTO RICO
10325

QA/QC REPORT - CALIBRATION DATA

On Site Project #02I0920GET
DAILY CALIBRATION DATE: 09/27/02

GEOENVIROTECH, INC. PROJECT NO. GET-02-053
PROJECT NAME: CORCO, PEÑUELAS

			INITIAL		OPENING			CLOSING		
COMPOUND	DETECTOR	CALIB RANGE	RF	%RSD	AREA	RF	%DIFF	AREA	RF	%DIFF
TPH GASOLINE	FID #2 (gc5)	10 - 30,000	0.11	10.1%	40.86	0.10	5.4%	41.93	0.10	2.9%
TPH GASOLINE	FID #4 (gc5)	10 - 30,000	0.19	14.4%	73.54	0.18	3.2%	77.60	0.19	2.1%

CALIB RANGE - RANGE OF CALIBRATION CURVE IN ppm
INITIAL RF - AVERAGE RESPONSE FACTOR FROM MULTIPOINT CALIBRATION CURVE
% RSD - LINEARITY OF MULTIPOINT CALIBRATION CURVE (+/- 20% ACCEPTABLE LIMITS)
AREA - AREA COUNTS FROM DAILY CALIBRATION STANDARD
RF - DETECTOR RESPONSE FACTOR FROM MID-POINT CALIBRATION STANDARD
% DIFF - DIFFERENCE, IN PERCENT, BETWEEN THE AVERAGE RF AND THE OPENING OR CLOSING RF (+/- 15% ACCEPTABLE LIMITS)
OPENING - MID-POINT CALIBRATION STANDARD ANALYZED BEFORE SAMPLE ANALYSES BEGIN
CLOSING - MID-POINT CALIBRATION STANDARD ANALYZED AFTER SAMPLES ANALYSES ARE COMPLETE

ANALYSES PERFORMED BY: MARCO A. PEDRAZA
DATA REVIEWED BY: KEVIN SHELBURNE

ON SITE LABS, INC.
PMB 627, HC-01 BOX 29030, CAGUAS, P.R. 00725
TELEPHONE (787) 720-0329 FAX 789-3858

QA/QC REPORT - MS/MSD DATA

MATRIX SPIKE (MS)/MATRIX SPIKE DUPLICATE (MSD)

On Site Project #02I0920GET
DATE: 09/27/02

GEOENVIROTECH, INC. PROJECT NO. GET-02-053
PROJECT NAME: CORCO

COMPOUND	SPK CON (ppm)	MS CONC (ppm)	%REC MS	MSD CONC (ppm)	%REC MSD	RPD	ACCEPTABLE RPD	ACCEPTABLE RECOVERY
TPH-GASOLINE	100	97	97%	101	101%	3%	15%	77% - 129%

ppm = PARTS PER MILLION
MS CONC - ANALYZED CONCENTRATION OF SPIKED SAMPLE
% REC - PERCENT RECOVERY OF SPIKE FROM MATRIX
RPD - RELATIVE PERCENT DIFFERENCE BETWEEN MATRIX SPIKE AND MATRIX SPIKE DUPLICATE RECOVERIES

ANALYSES PERFORMED BY: MARCO A. PEDRAZA
DATA REVIEWED BY: KEVIN SHELBURNE

ON SITE LABS, INC.
PMB 627, HC-01 BOX 29030, CAGUAS, P.R. 00725
TELEPHONE (787) 720-0329 FAX 789-3858

LABORATORY QA/QC

GEOENVIROTECH, INC.

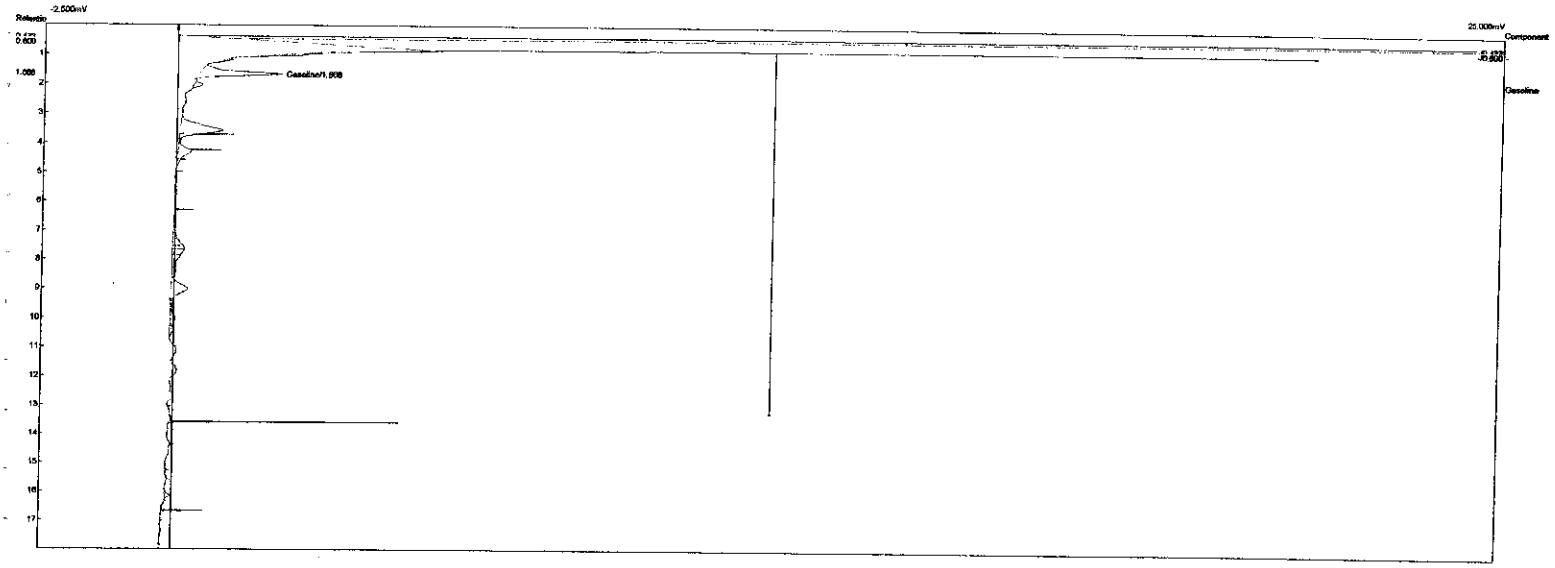
OSL Project #02I0920GET

TPH (Mod. EPA Method 8015B) ANALYSES OF SOIL

SAMPLE NUMBER	DATE ANALYZED	TPH-GAS C_5 - C_{12} (mg/Kg)
B - 203	09/27/02	ND
B - 203 REP	09/27/02	ND
DETECTION LIMIT (mg/Kg)		10

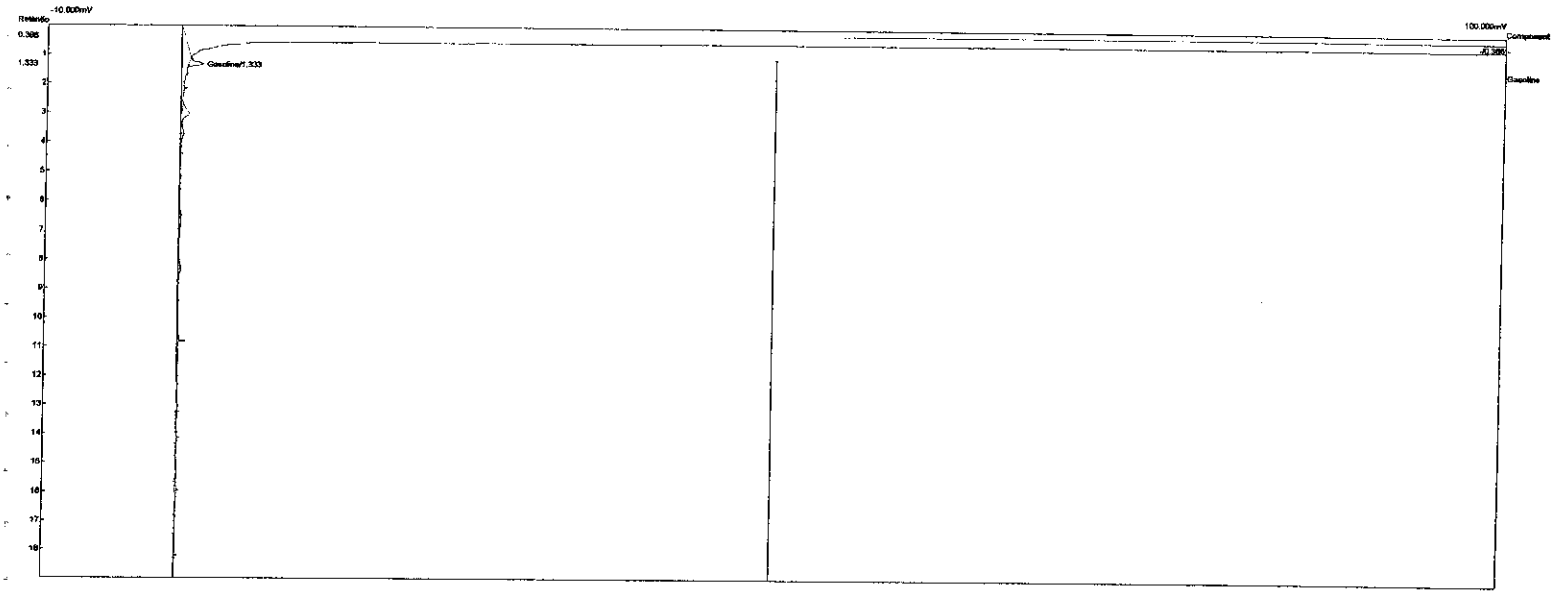
mg/Kg = MILLIGRAMS PER KILOGRAM
REP = LABORATORY REPLICATE
"ND" INDICATES ANALYTE NOT DETECTED AT OR ABOVE THE LISTED DETECTION LIMIT
ANALYSES PERFORMED BY: MARCO A. PEDRAZA
DATA REVIEWED BY: KEVIN SHELBURNE

Analysis date: 09/27/2002 10:30:58
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0927FB1.chr ()
Sample: 100 ppm GAS OPEN
Operator: MAP



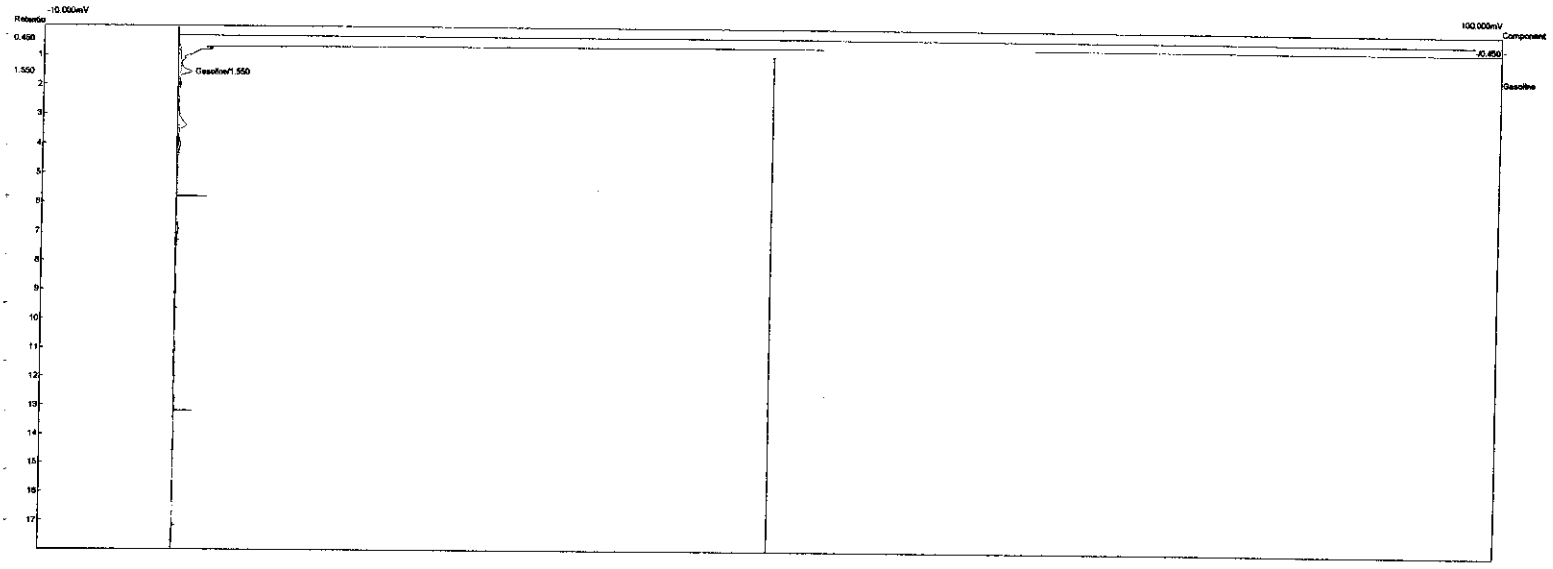
Component	Retention	Area	External	Internal	Units
Gasoline	1.666	40.863	94.59	94.5903	ppm
		40.863	94.59	94.5903	

Analysis date: 09/27/2002 10:30:58
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI 5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0927fd1.CHR ()
Sample: 100 ppm Gas open std
Operator: MAP



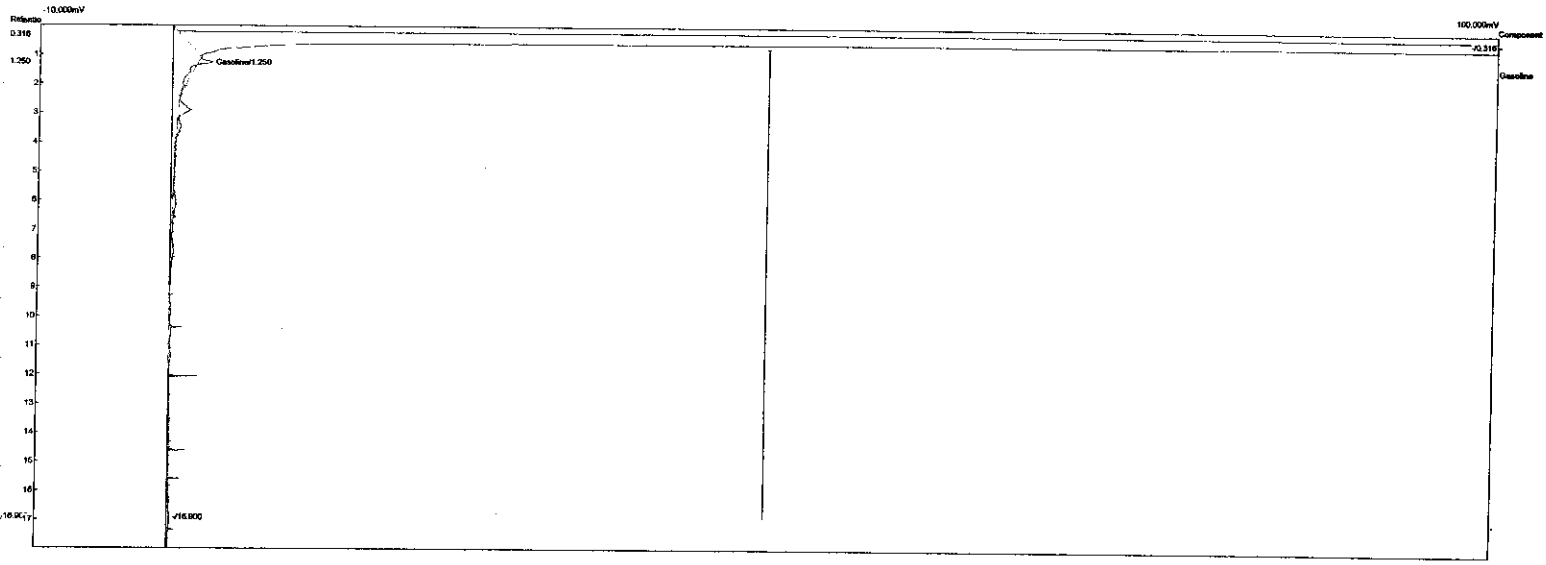
Component	Retention	Area	External	Internal	Units
Gasoline	1.333	73.543	96.77	96.7678	ppm
Diesel	27.866	1.684	0.91	0.9093	
		75.227	97.68	97.6771	

Analysis date: 09/27/2002 17:58:55
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: C:\PEAKW95\0927EB15.CHB ()
Sample: 100 ppm gas close std
Operator: MAP



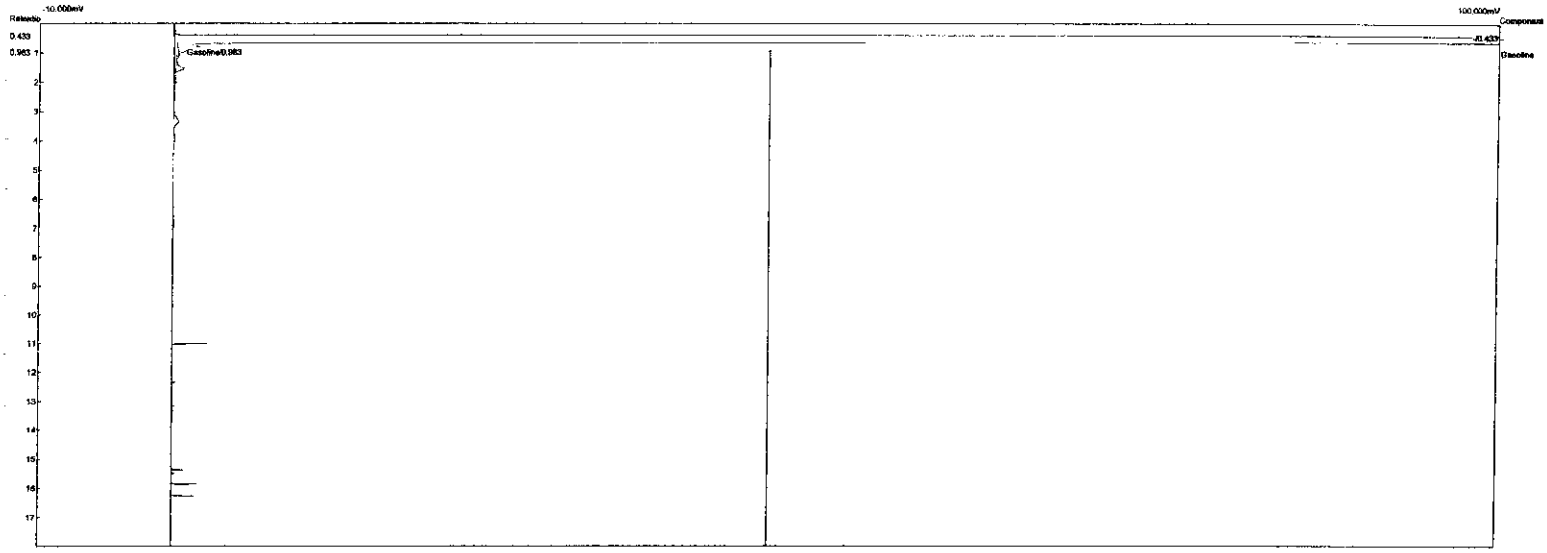
Component	Retention	Area	External	Internal	Units
Gasoline	1.550	41.927	97.05	97.0532	ppm
		41.927	97.05	97.0532	

Analysis date: 09/27/2002 17:58:55
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0927fd15.CHR ()
Sample: 100 ppm gas close std
Operator: MAP



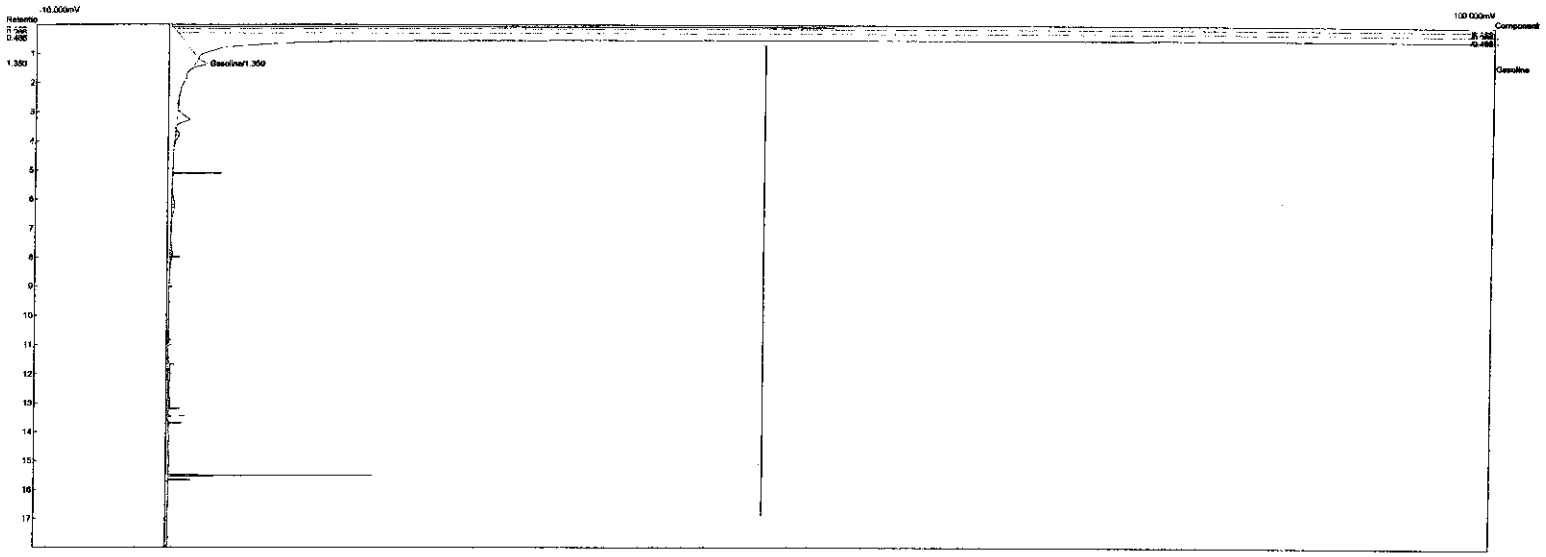
Component	Retention	Area	External	Internal	Units
Gasoline	1.250	77.595	102.10	102.0980	ppm
		77.595	102.10	102.0980	

Analysis date: 09/27/2002 17:37:36
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: C:\PEAKW95\0027ED14.RUN
Sample: b-203matrix spike
Operator: MAP



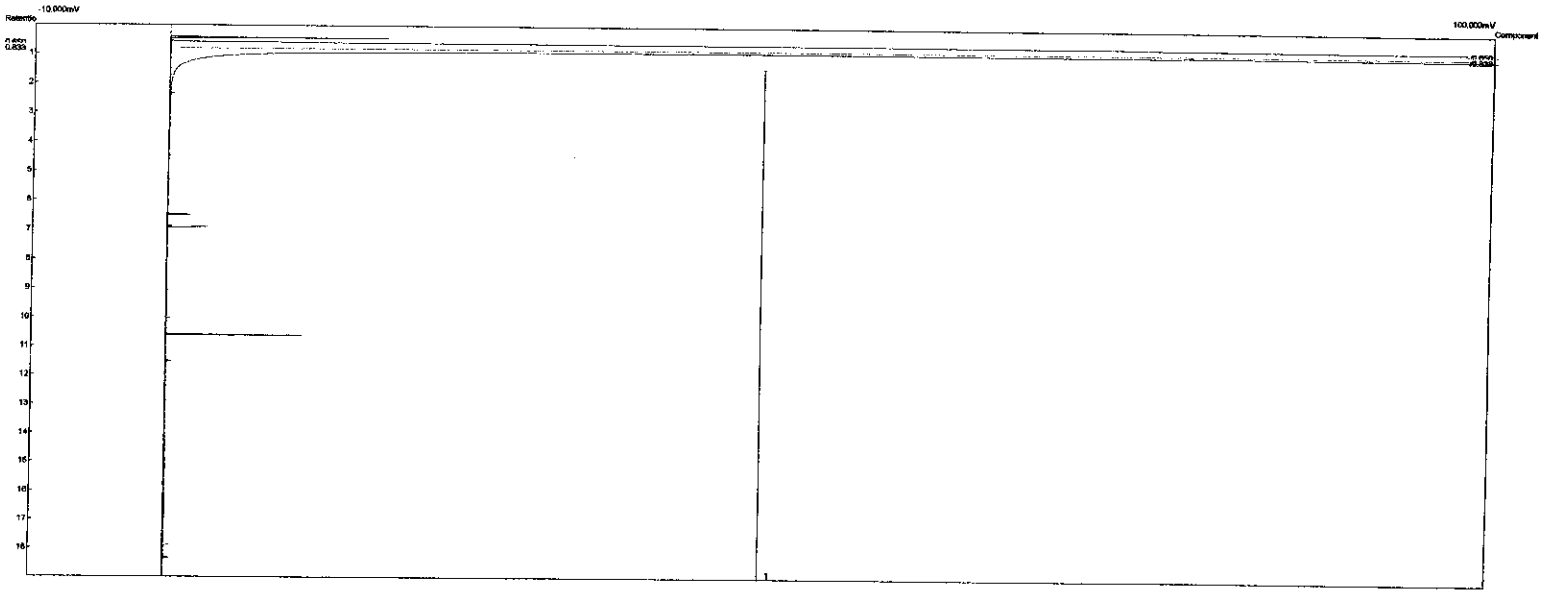
Component	Retention	Area	External	Internal	Units
Gasoline	0.983	42.056	97.35	97.3530	ppm
		42.056	97.35	97.3530	

Analysis date: 09/27/2002 17:37:36
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0927fd14.CHR ()
Sample: 5 203matrix spike duplicate
Operator: MAP



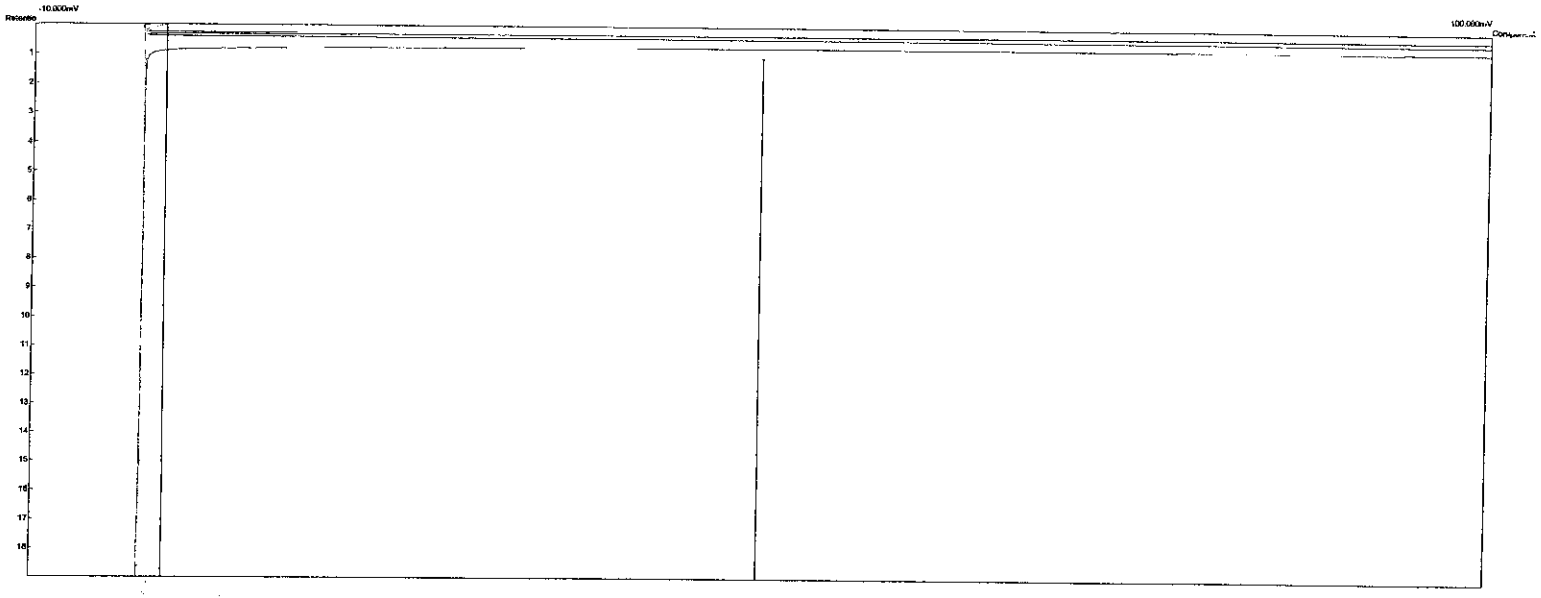
Component	Retention	Area	External	Internal	Units
Gasoline	1.350	76.558	100.73	100.7349	ppm
		76.558	100.73	100.7349	

Analysis date: 09/27/2002 12:55:00
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI 5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 092703.chr (1)
Sample: method blank
Operator: MAP



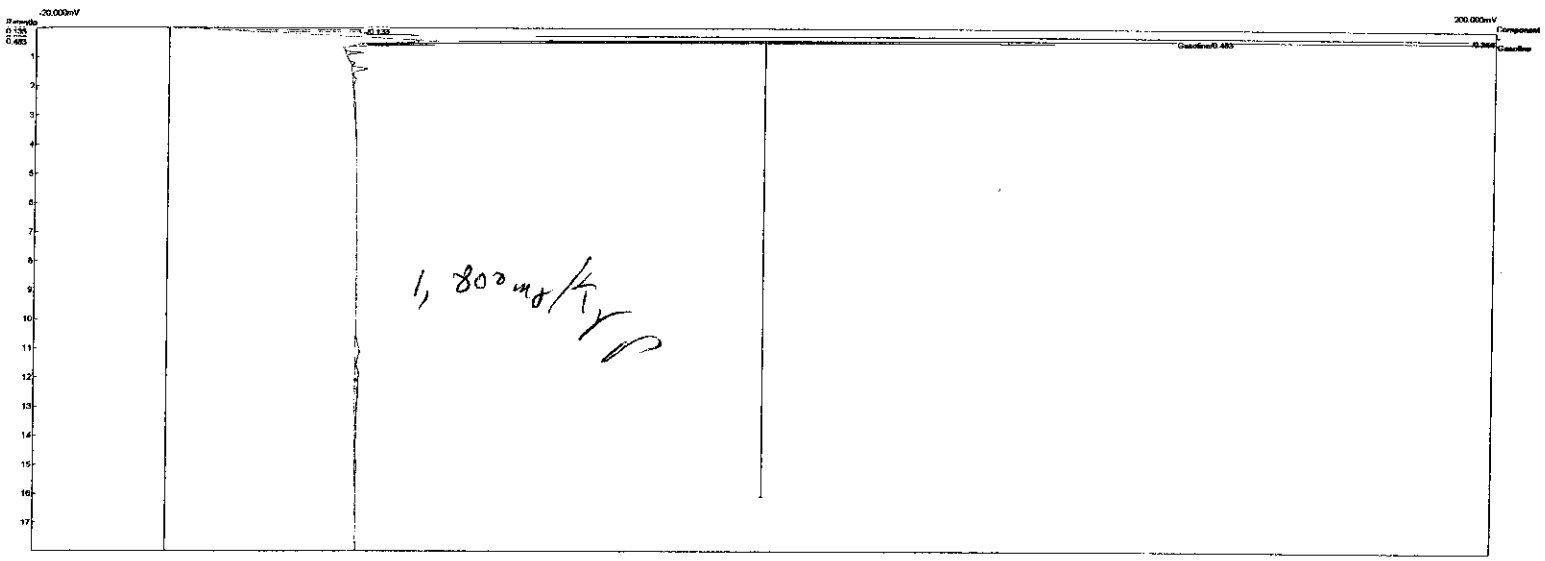
Component	Retention	Area	External	Internal	Units
		0.000	0.00	0.0000	

Analysis date: 09/27/2005 12:[illegible]
Method: EPA 8015B mod.
[illegible] ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI E, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 092705[illegible]
[illegible]: Method blank
Operator: MAP



Component	Retention	Area	External	Internal	Units
		0.000	0.00	0.0000	

Analysis date: 09/27/2002 14:39:57
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: C:\PEAKW95\092702\FB14.chr ()
Sample: 3201/0920GET
Operator: MAP

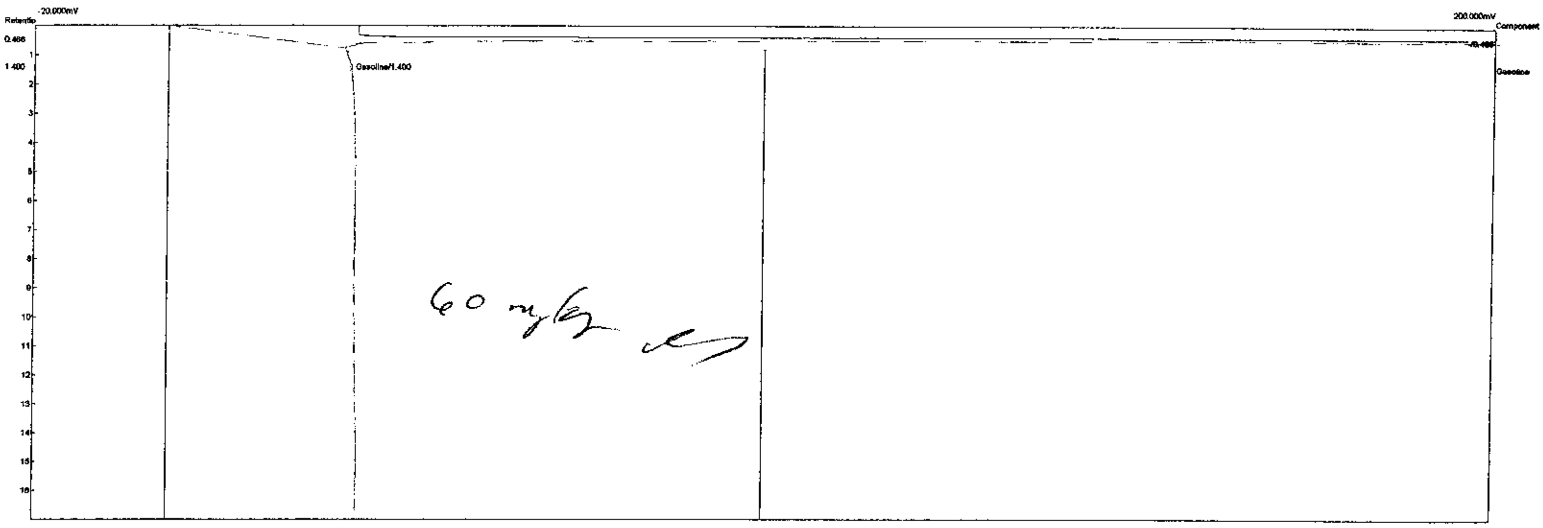


1,802 mg/kg

Component	Retention	Area	External	Internal	Units
Gasoline	0.483	326.057	754.76	754.7604	ppm
		326.057	754.76	754.7604	

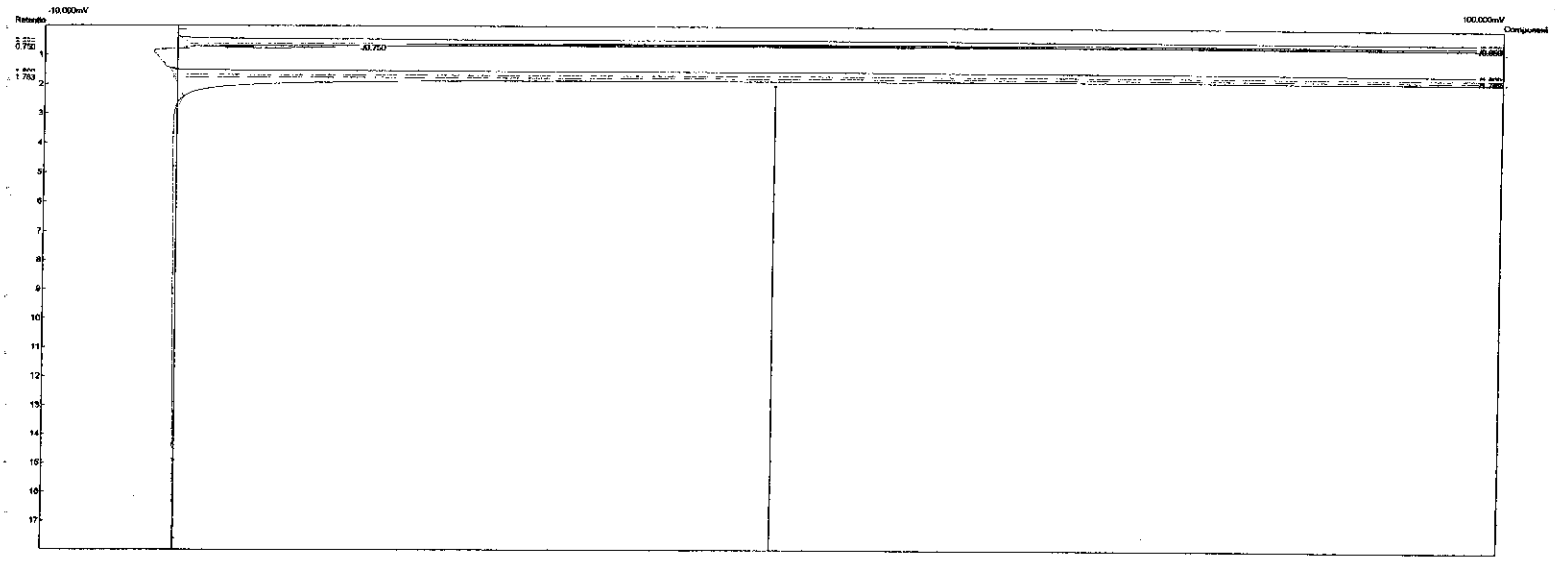
x2k dil = 1773.92

Analysis date: 09/27/2002 15:03:54
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0927fb9.chr ()
Sample: B-202/0920GET
Operator: MAP



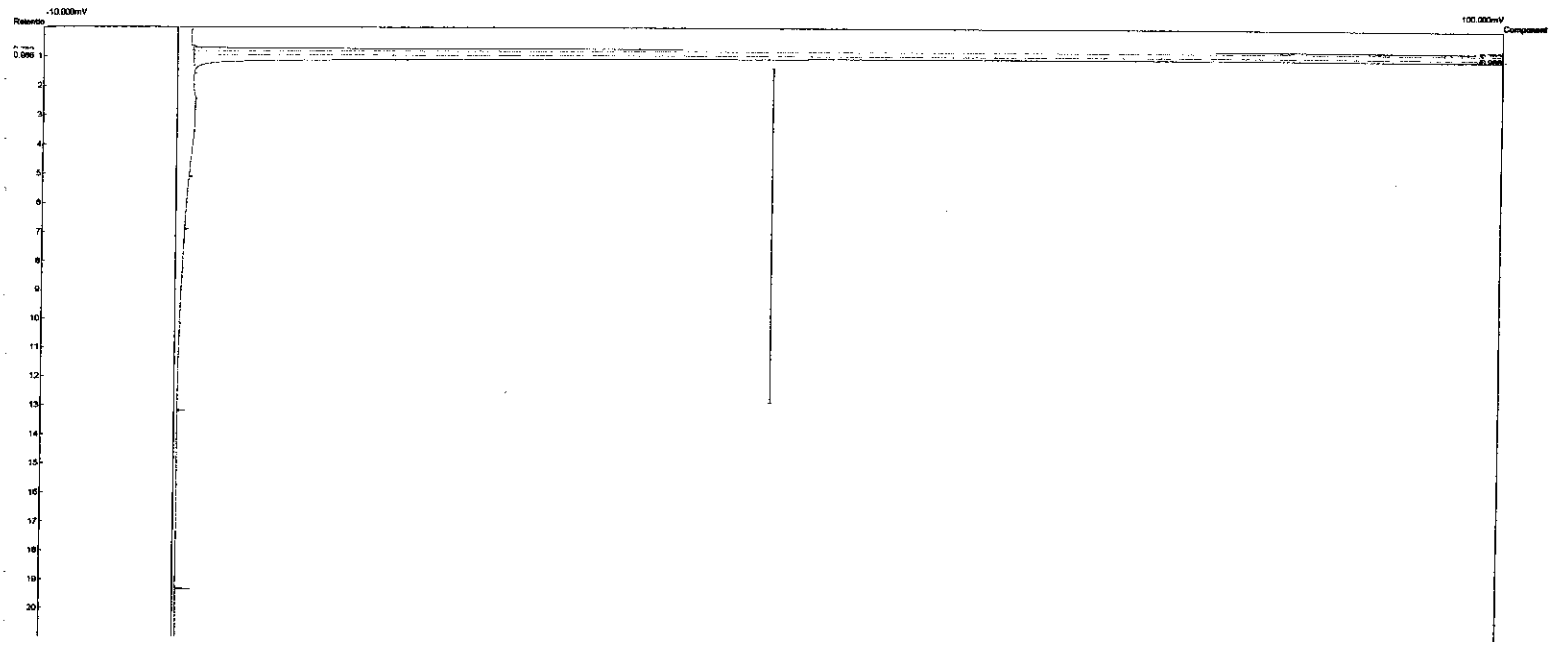
Component	Retention	Area	External	Internal	Units
Gasoline	1.400	11.638	26.94	26.9398	ppm 60/.904 = 55.60
		11.638	26.94	26.9398	

Analysis date: 09/27/2002 15:26:59
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: C:\PEAKW95\0927EB10.CHB
Sample: D 203/0920GET
Operator: MAP



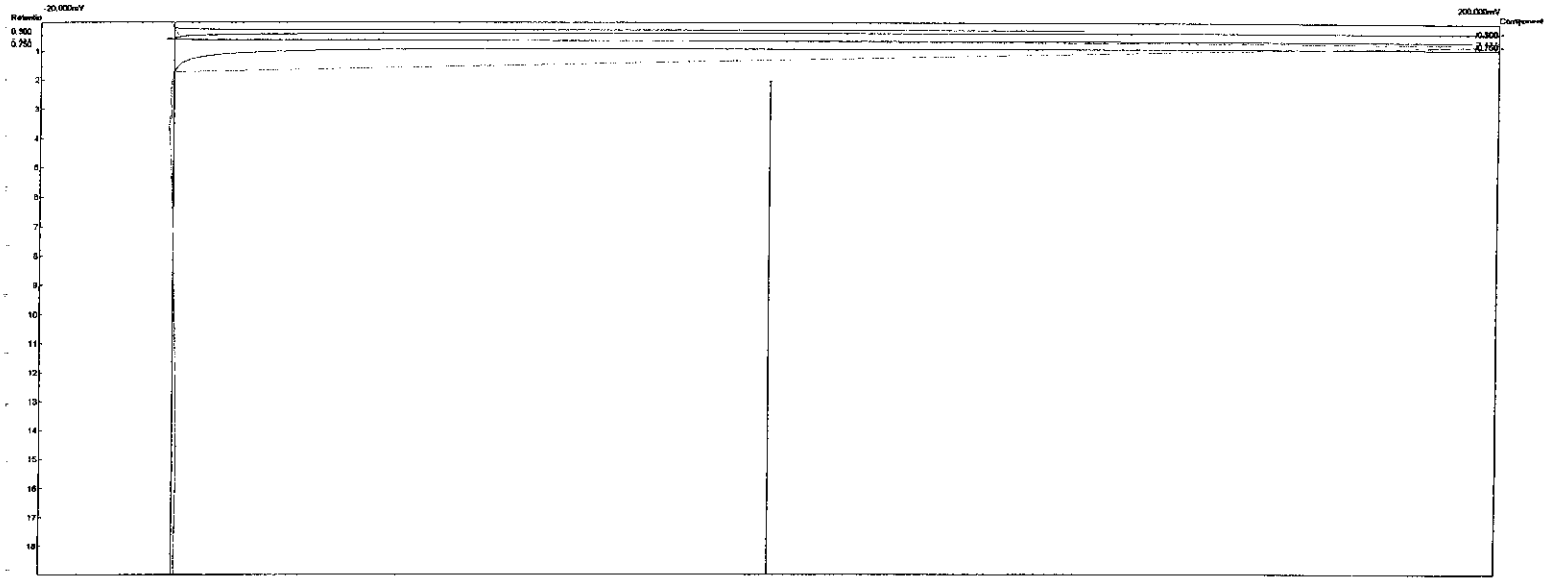
Component	Retention	Area	External	Internal	Units
Gasoline		0.000	0.00	0.0000	

Analysis date: 09/27/2002 17:03:35
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI 5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0927fd13.CHR ()
Sample: B 203/0920GET REP
Operator: MAP



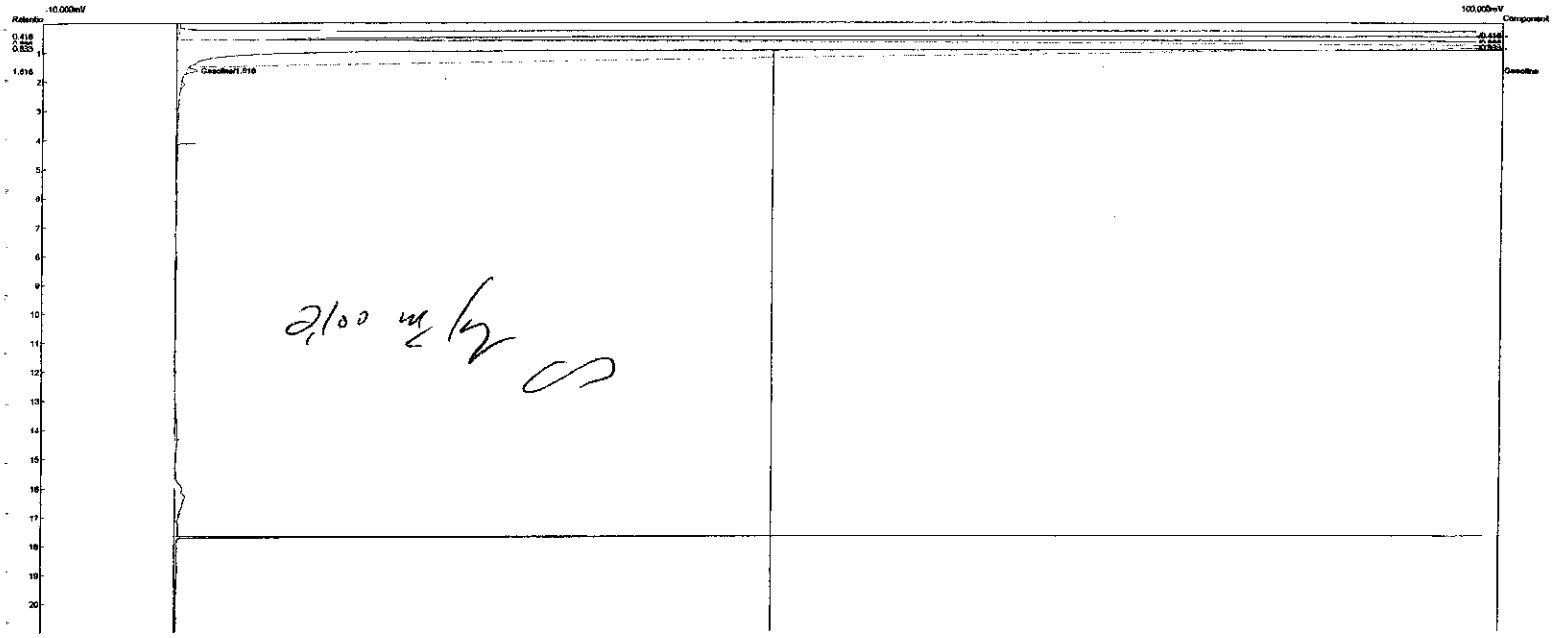
Component	Retention	Area	External	Internal	Units
Gasoline		0.000	0.00	0.0000	

Analysis date: 09/27/2002 [illegible]
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: C:\PEAK\GC5\027FB11.CHR ()
Sample: D:204/0920GET
Operator: MAP



Component	Retention	Area	External	Internal	Units
Gasoline		0.000	0.00	0.0000	

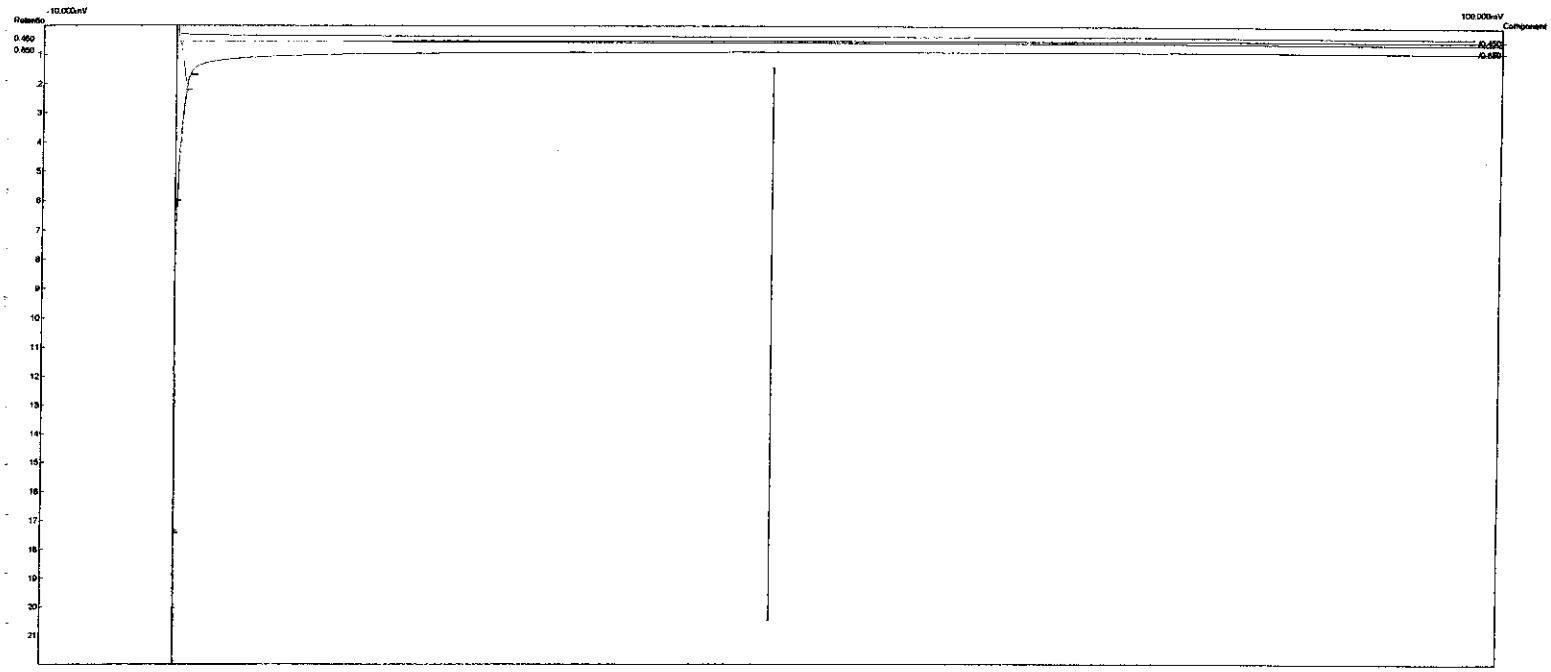
Analysis date: 09/27/2002 17:03:36
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: C:\PEAKW95\0927FB13.CHR ()
Sample: B 205/0920GET
Operator: MAP



Component	Retention	Area	External	Internal	Units
Gasoline	1.616	409.065	946.91	946.9086	ppm
		409.065	946.91	946.9086	

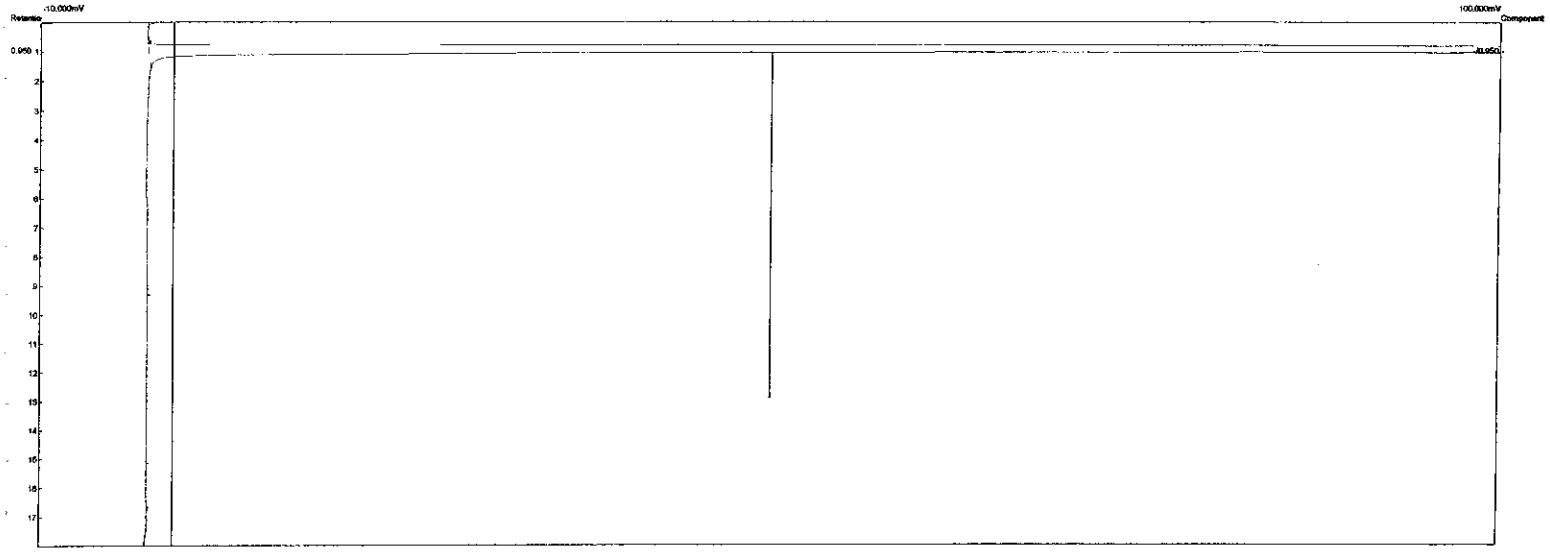
x 2.179 = 2,060.7 ~ 2,100 ppm

Analysis date: 09/27/2002 16:33:02
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID2 - Ch. 2
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: C:\PEAKW95\0927FB12.CHR ()
Sample: B-210/0920GET
Operator: MAP



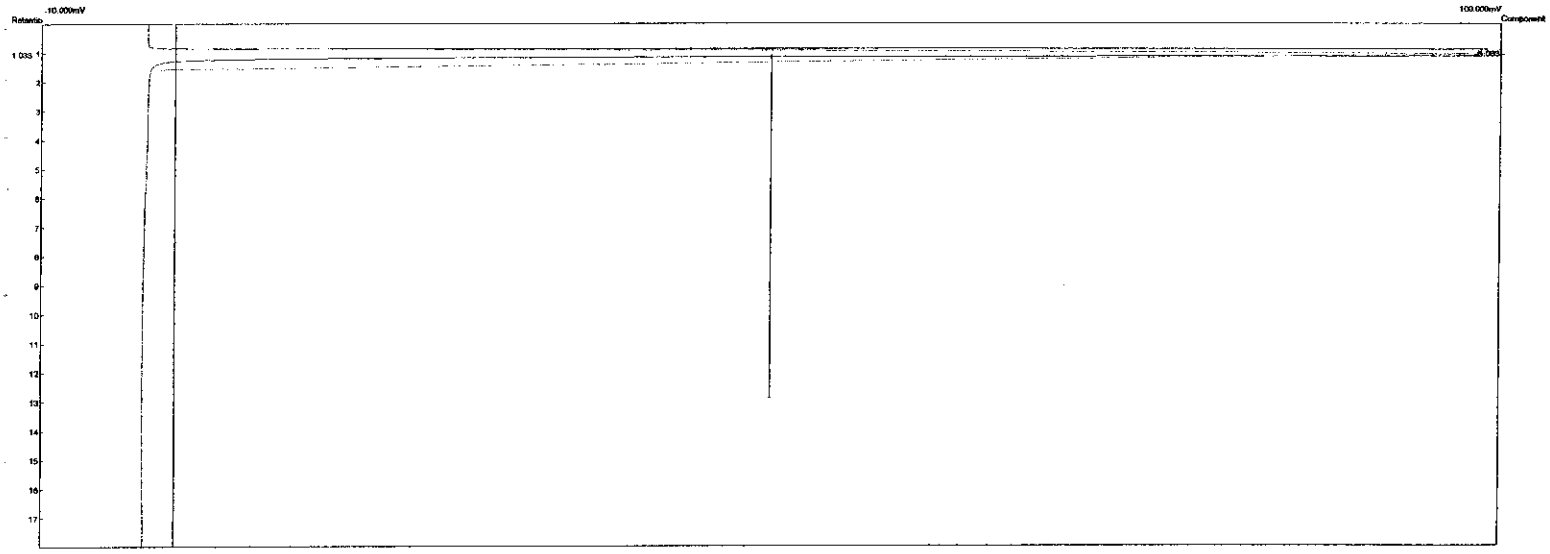
Component	Retention	Area	External	Internal	Units
		0.000	0.00	0.0000	

Analysis date: 09/27/2002 13:13:32
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0927fd5.CHR
Sample: TA 09/18/02 /0920GET
Operator: MAP



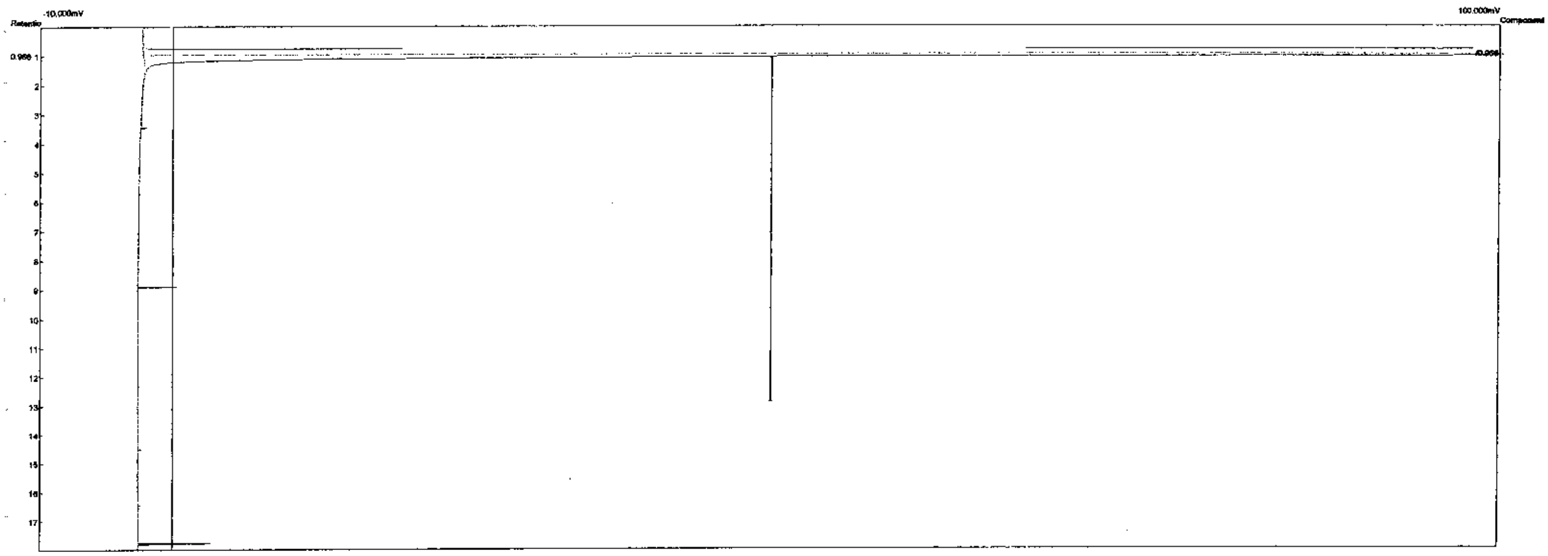
Component	Retention	Area	External	Internal	Units
		0.000	0.00	0.0000	

Analysis date: 09/27/2002 13:33:02
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI 5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0927fid6.chr ()
Sample: FQ 09/18/02 /0920GET
Operator: MAP



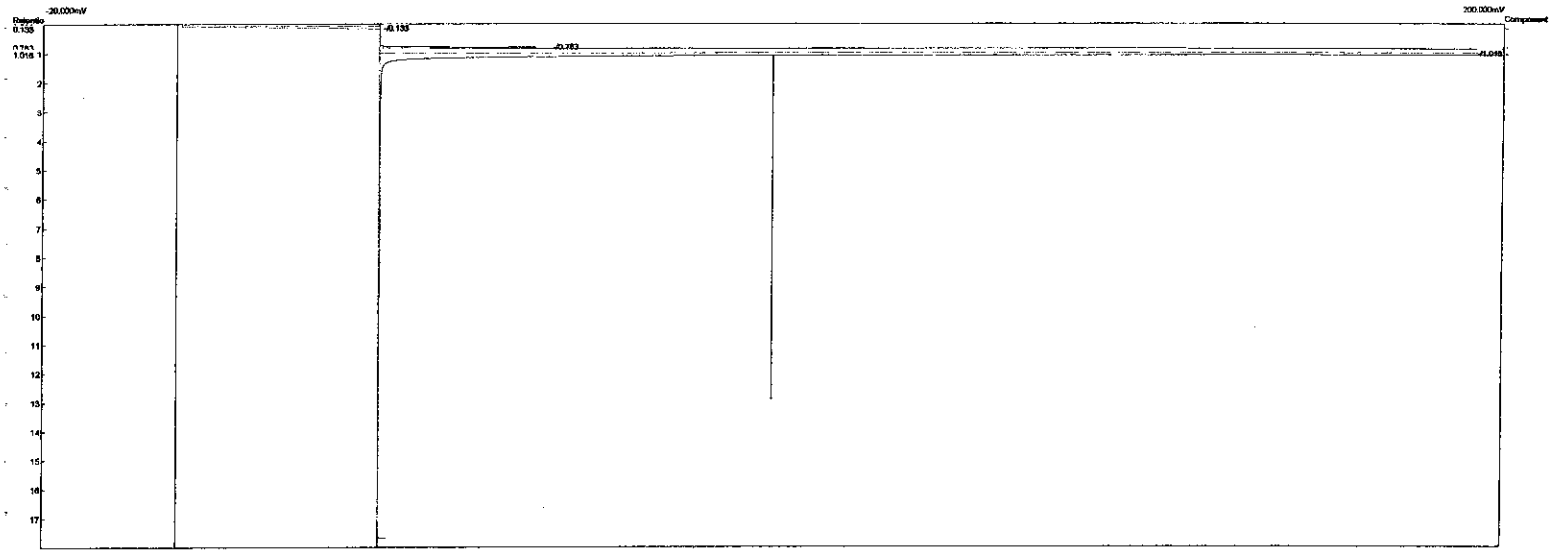
Component	Retention	Area	External	Internal	Units
		0.000	0.00	0.0000	

Analysis date: 09/27/2002
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0927fid7.chr
Ea 09/18/02 /0920GET
Operator: MAP



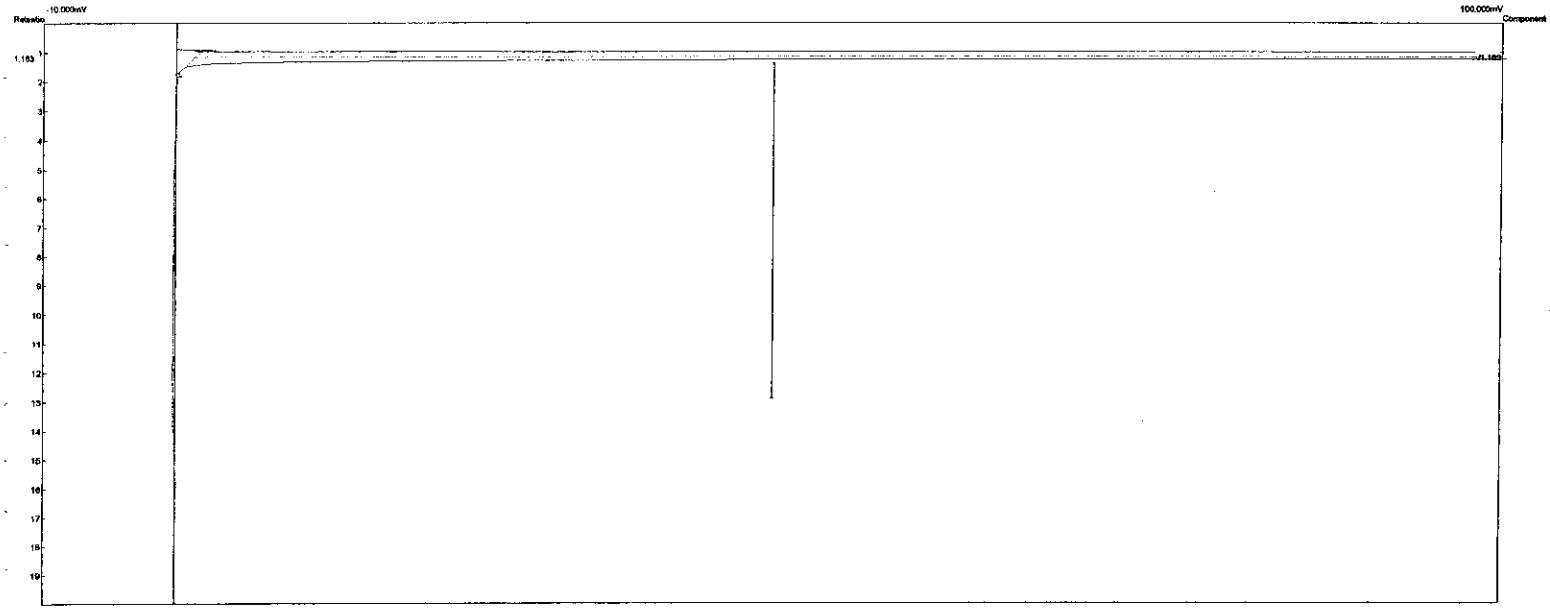
Component	Retention	Area	External	Internal	Units
		0.000	0.00	0.0000	

Analysis date: 09/27/2002 [illegible]
Method: EPA 8015B mod.
[illegible] GC - 5
Description: FID 4 - Ch. 4
Column: XTI 5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0927fd9.chr ()
[illegible] 09/27/02 /0920GET
Operator: MAP



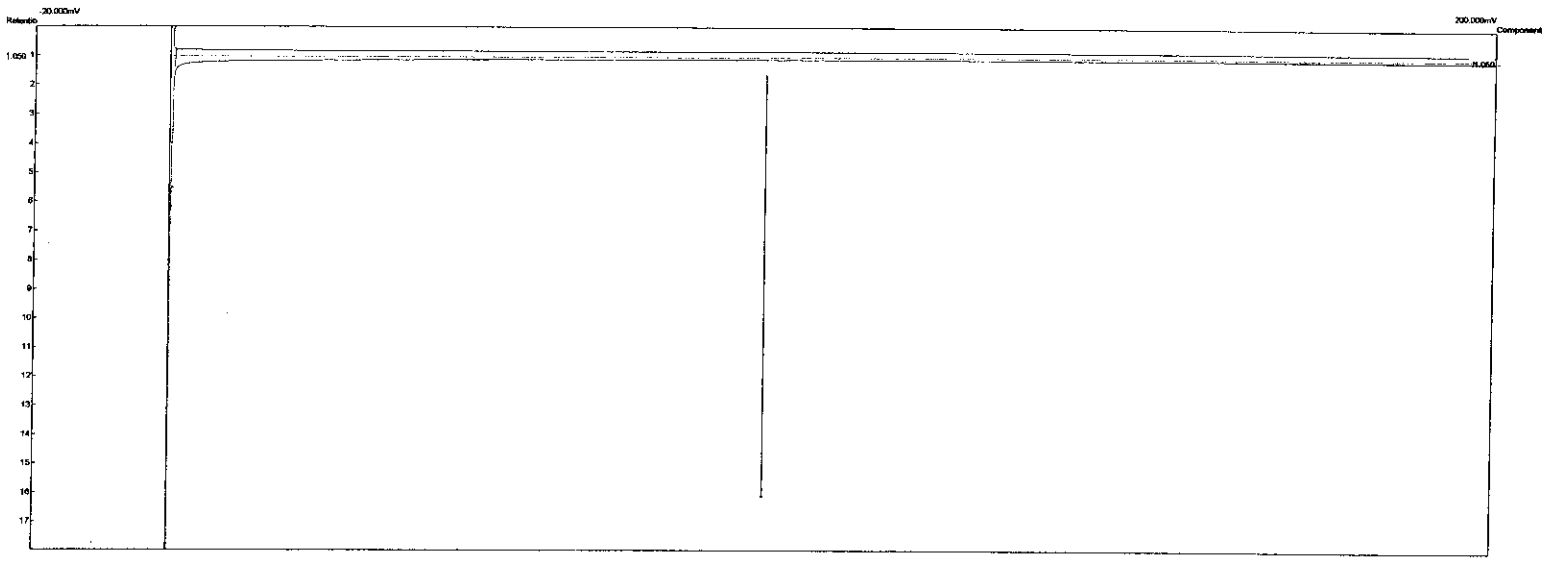
Component	Retention	Area	External	Internal	Units
		0.000	0.00	0.0000	

Analysis date: 09/27/2002 15:26:59
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0927fd10.CHR ()
Sample: 09/19/02 /0920GET
Operator: MAP



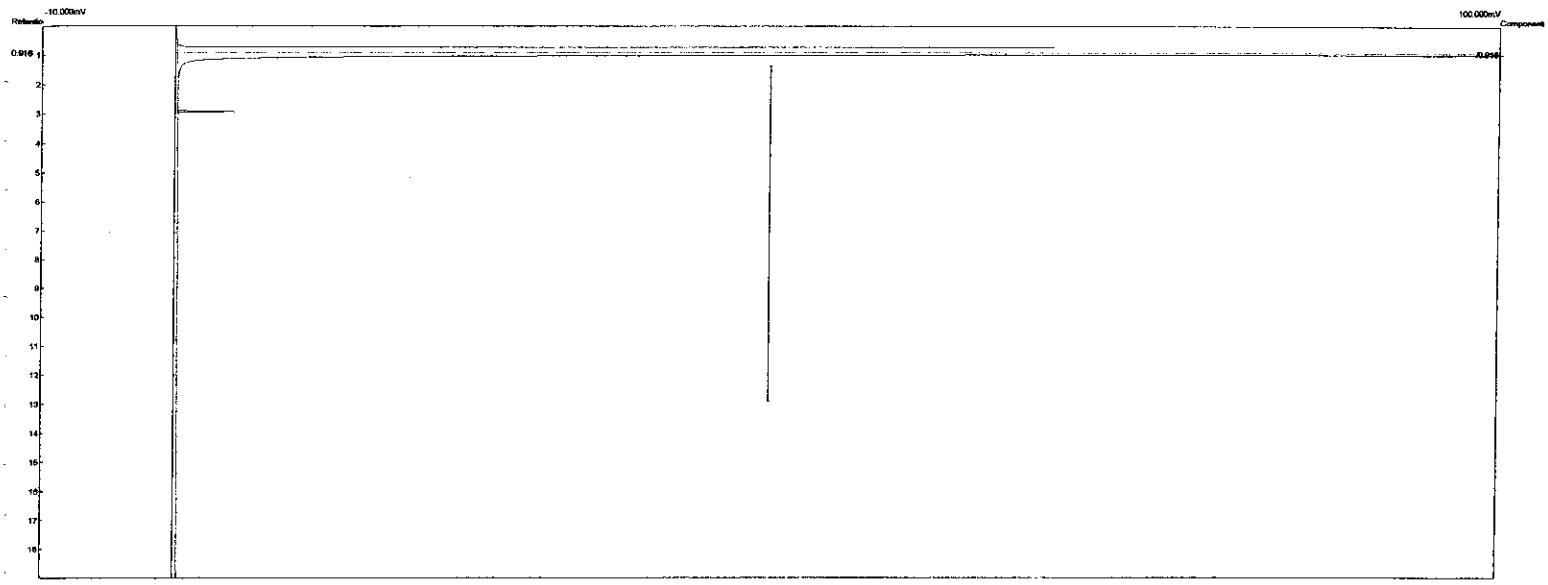
Component	Retention	Area	External	Internal	Units
		0.000	0.00	0.0000	

Analysis date: 09/27/2002 16:33:02
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0927FD12.chr ()
Sample: SD 09/20/02 /0920GET
Operator: MAP



Component	Retention	Area	External	Internal	Units
		0.000	0.00	0.0000	

Analysis date: 09/27/2002 15:48:57
Method: EPA 8015B mod.
Lab ID: GC - 5
Description: FID 4 - Ch. 4
Column: XTI-5, 30m, 0.53mm, 1.5um
Carrier: N2
Data file: 0927fd11.CHR ()
Sample: FB 09/20/02 /0920GET
Operator: MAP



Component	Retention	Area	External	Internal	Units
		0.000	0.00	0.0000	

On Site Labs, Inc.

Chain of Custody Record

PO # _____

Client: GeoEnviroTech, Inc.

Address: #7 Acuarela St., Guaynabo, PR

Phone: (787) 720-5869 FAX: (787) 720-2318

Client Project #: GET-02-053 Project Manager: Juan D. Negrón

Date: Sept. 20, 2002 Page 1 of 3

LAB Project #: 02I0920GET Control#: 2183

Location: CORCO, Peñuelas, Puerto Rico

Collector: Juan D. Negrón-[illegible] Date of Collection: Sept. 18, 2002

Sample Name	(feet) Depth	Time	Sample Matrix	Container Type	"Grab or Composite"	8021	8020 A (BTEX)	VOL 8260	SEMI VOL 8270	TRPH 418.1	TPH 8015 B (gasoline)	TPH 8015 B (diesel)	TPH 8015 B (gas & diesel)	TPH 8015 B (motor oil)	TPH 8015 B (full range)	TOTAL LEAD	TCLP LEAD	METALS	RCI	8082-PCBS	8082-Pesticide	PNA 610/8100	TCLP METALS			FIELD NOTES / PRESERVATION	Total # of Containers
TB - 09/18/02	—	—	W	40 ml	G						✓															Iced	2
EB - 09/18/02	—	10:00	W	40 ml	G						✓																2
FB - 09/18/02	—	14:55	W	40 ml	G						✓																2
B - 201	25-30	1205	S	2 oz	G						✓																1
B - 202	25-30	1450	S	2 oz	G						✓																1

RELINQUISHED BY (signature)	Date/Time	RECEIVED BY (signature)	Date/Time
Juan D Negrón	9/20/02 1400	K Shelburne	9/20/02 14:00
RELINQUISHED BY (signature)	Date/Time	RECEIVED BY (signature)	Date/Time

Total # of containers: 20

Chain of Custody seals Y / N / (NA)

Seals Intact? Y / N / (NA)

Received good conditions / (Cold)

TEMPERATURE: ice bath 4.5°C

G=Grab C=Composite S=Soil W=Aqueous

On Site Labs, Inc.

Chain of Custody Record

PO # _____

Client: Geo Enviro Tech, Inc.

Address # 7 Acuarela St, Guaynabo, Puerto Rico

Phone (787) 720-5869 FAX (787) 720-2318

Client Project # GET-02-053 Project Manager Juan D. Negrón

Date Sept. 20, 2002 Page 2 of 3

LAB Project # 02I0920GET Control# 2183

Location CORCO, Peñuelas, Puerto Rico

Collector Juan D. Negrón - JDN Date of Collection Sept. 19, 2002

Sample Name	(feet) Depth	Time	Sample Matrix	Container Type	"Grab Composite"	8021	8020 A (BTEX)	VOL 8260	SEMI VOL 8270	TRPH 418.1	TPH 8015 B (gasoline)	TPH 8015 B (diesel)	TPH 8015 B (gas & diesel)	TPH 8015 B (motor oil)	TPH 8015 B (full range)	TOTAL LEAD	TCLP LEAD	METALS	RCI	8082-PCBS	8082-Pesticide	PNA 610/8100	TCLP METALS			FIELD NOTES / PRESERVATION	Total # of Containers
EB - 09/19/02	-	9:00	W	40 ml	G						✓															Iced	2
FB - 09/19/02	-	13:15	W	40 ml	G						✓																2
B - 203	5-10	10:20	S	2 oz	G						✓																1
B - 204	10-11.5	13:10	S	2 oz	G						✓																1
B - 210	5-10	10:45	S	2 oz	G						✓																1

RELINQUISHED BY (signature)	Date/Time	RECEIVED BY (signature)	Date/Time
Juan D Negrón	9/20/02 1400	K Shelburne	9/20/02 14:05
RELINQUISHED BY (signature)	Date/Time	RECEIVED BY (signature)	Date/Time

Total # of containers 20

Chain of Custody seals Y / N (NA)

Seals Intact? Y / N (NA)

Received good conditions (cold) YES

TEMPERATURE Ice bath 4.5°C

G=Grab C=Composite S=Soil W=Aqueous

On Site Labs, Inc.

Chain of Custody Record

PO # _____

Client: Geo EnviroTech, Inc.
Address #7 Acuerdo St., Guaynabo, PR
Phone (787) 720-5869 FAX (787) 720-2318
Client Project # GET-02-053 Project Manager Juan D Negron

Date Sept. 20, 2002 Page 3 of 3
LAB Project # OZI0920GET Control# 2183
Location CORCO, Peñuelas, Puerto Rico
Collector Juan D Negrón Date of Collection Sept. 20, 2002

Sample Name	Depth (Feet)	Time	Sample Matrix	Container Type	"Grab Composite"	8021	8020 A (BTEX)	VOL 8260	SEMI VOL 8270	TRPH 418.1	TPH 8015 B (gasoline)	TPH 8015 B (diesel)	TPH 8015 B (gas & diesel)	TPH 8015 B (motor oil)	TPH 8015 B (full range)	TOTAL LEAD	TCLP LEAD	METALS	RCI	8082-PCBS	8082-Pesticide	PNA 610/8100	TCLP METALS			FIELD NOTES / PRESERVATION	Total # of Containers
EB-09/20/02	–	9:10	W	40 ml	G						✓															Iced	2
FB-09/20/02	–	10:55	W	40 ml	G						✓																2
B-205	15-20	10:00	S	2 oz	G						✓																1

RELINQUISHED BY (signature) Juan D Negrón Date/Time 9/20/02 1400
RECEIVED BY (signature) K Shelburne Date/Time 9/20/02 1405
RELINQUISHED BY (signature) Date/Time
RECEIVED BY (signature) Date/Time

Total # of containers 20
Chain of Custody seals Y / N / (NA)
Seals Intact? Y / N / (NA)
Received good conditions / cold YES

TEMPERATURE Ice bath 4.5°C

G=Grab C=Composite S=Soil W=Aqueous